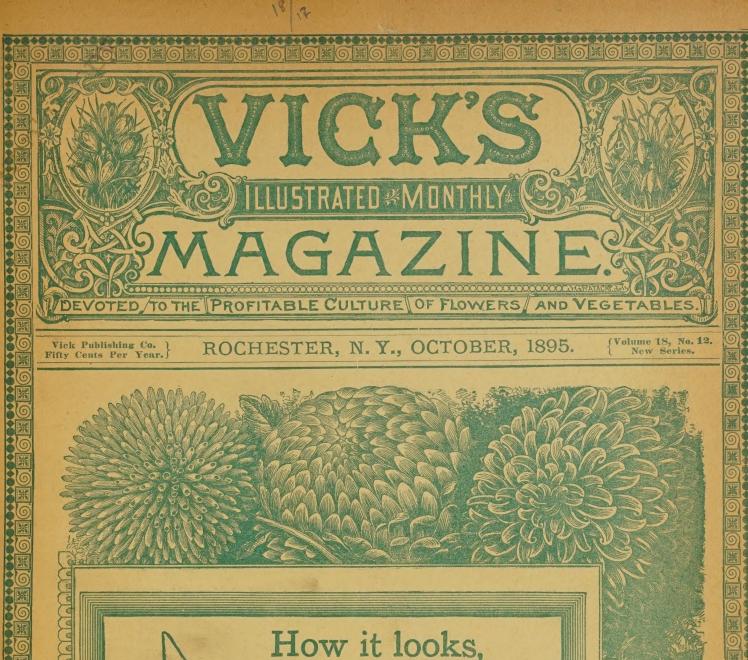
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How it looks,

to the women who wash with Pearline, when they see a woman washing in the old-fashioned way with soap—rubbing the clothes to pieces, rubbing away her strength, wearing herself out over the washboard! To these Pearline women, fresh from easy washing, she seems to "wear a fool's cap unawares.

Everything's in favor of Pearlineeasier work, quicker work, better work, safety, economy. There's not one thing against it. What's the use of washing in the hardest way, when it costs more money? 489

2 cts. - Fifty Choice Named Flowering Bulbs. - 2 cts.

DELIVERED AT YOUR DOOR, CHARGES PAID.

The collection is not made up of large quantities of small bulbs that retail at Fifty cents per hundred, and which give some dealers a handsome profit. On the contrary Vick's Star Collection has been sold for the past three years, giving to all purchasers the best of satisfaction, and we hold numerous testimonials verifying this fact. The bulbs offered in this collection have all been specially grown for us, and are of the very highest quality, sure to produce beautiful flowers and true to name; and consider, only two cents apiece. Sold in this collection only.

READ CAREFULLY THE VARIETIES OFFERED.

There is a greater difference in the form and color of the Ixias than with almost any other class of plants. They make a nice addition, and will give variety to the larger bulbs, as Hyacinths, etc.

Rosy crimson, canary yellow, and pure white. For all positions calling for graceful and effective flowering plants, these flowers excel.

Including the pure white L'Immaculæ, Carmine King, and charming Yellow Prince, with three of those most striking and handsome PARROT tulips, a curious and interesting sort.

Large, fine named bulbs. SIR ROBERT PEEL, azure blue; QUEEN VICTORIA, pure white; PRESIDENT GRANT, fancifully striped; MAMMOTH GOLDEN, beautiful yellow; PRINCESS OF WALES, dark blue; LA MAJESTEUSE, beautifully striped.

3 Jonquils Admirably adapted for window culture.
Deliciously sweet scented, and the large golden flowers make a beautiful picture.

4 Anemone The beautiful Wind Flower, finest colors.

Two single and two double.

2 Narcissus Large flowering Grand Monarque and Paper White grandiflora.

3 Narcissus Single Von Sion.

The finest named of this class of beautiful flowers. Amy, red; Baron Von Tuyll, white; Regulus, blue.

3 Scilla Siberica One of the brightest, prettiest and hardiest of the early sprng flowers.

2 Roman Hyacinths

This is a valuable and beautiful variety; each bulb produces several graceful spikes of bloom. The pearly whiteness and delicious perfume make them exceedingly popular

6 Freesia refracta alba

Flowers of the purest white, giving forth an exquisite fragrance.

6 Allium Neapolitanum

Will start to grow as soon as potted, and showing clusters of delicate white flowwith a distinct beauty of their own.

\$1.00 ~ FIFTY BULBS ~ \$1.00 sold in Collection Only.

A Christmas present might be anticipated by ordering a collection sent to some far away friend, and at the holiday season the beautiful flowers would prove a continual reminder of the donor.

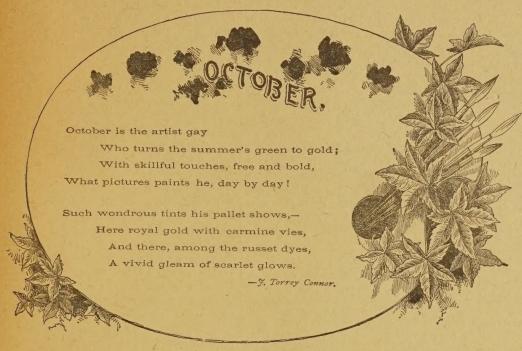


REMEMBER ...

One Dollar delivers these Choice Bulbs at your door free of express or postal charges. Order early.



JAMES VICK'S SONS, SEEDSMEN, Rochester, N. Y.



HOW MILLIE MAY EARNED HER BULBS.



ILLIE MAY was the daughter of a farmer. She lived within three miles of a thriving town and often went there for the mail and to do shopping.

Millie was passionately fond of fancy work, and also had another passion which was stronger if possible than her love for dainty needle-work. She loved flowers with an intensity that is hard to be understood by those who have only a very moderate enthusiam about floriculture.

The fall catalogues of bulbs were at hand and Millie, pretty and disconsolate lover that she was, looked them over with her brows growing more and more puckered as she looked.

"Now if I could only trade off butter and eggs for bulbs," she soliloquized, "as I do for my bits of linen and Asiatic silks, why then I might—" but here the curly head shook vehemently, and we knew by the look on Millie's sweet face that this could not be thought of.

Millie's cousin from the east was visiting her and this cousin was a revelation to Millie; she had a great many good ideas, and Millie, brought up on a western farm, was quite enamored with her. Mina was always thinking of such nice plans and such good helpful things to do, that it was no more than according to the common

run of events that she should happen in and straightway see a way to set Millie in a course to get her long desired bulbs.

"What now, Millie?" she asked brightly, as she beheld the face so screwed up, and noted the vigorously shaken head. She bent over Millie as she spoke and pinching the soft cheek a little playfully, remarked: "Massage is beautifying, Millie, and some of our best city women use it as a means of beauty."

"You should have been a masseur," Millie retorted quickly, "if pinching is included in the beautifying process."

"Yes, surely," and again the white fingers pinched the girl's soft cheek. "There, now, I wish you could see yourself 'as ithers see you,'" Mina said, gleefully; "your cheeks are as pink, as pink,—as those pink hyacinths there, and pretty, why enough sight prettier," and the mischievous Mina kissed the red spots in both of Millie's cheeks.

"Well, but they're not hyacinths,—and I believe I would almost give my eyes for some of those lovely flowers," Millie said, half laughing, half in earnest.

"Oh, breaking the tenth commandment, cousin mine," eyebrows raised in mock consternation, "a good member of the meetin' house coveting, actually coveting another's property."

"Yes, but then that other has placed them out here in the most ravishing way, and makes word pictures that are quite as glowing as the colored prints themselves. Now here, see:

"'Hyacinth, Ida—double, color deep creamy |

yellow turning to satiny yellow; one of the most beautiful of all bulbs, producing immense spikes of lovely flowers very freely; price 50c.' That latter clause is the most vivid of all the coloring you see,—think of it, fifty cents for one bulb, but then it's worth it, and I wish, I wish I had that fifty cents."

"Accompanied by a lot more of fifty centses, eh?" put in Mina.

"Yea, verily," Millie responded, her eyes still on the catalogue. "Look at this, 'Seven Chinese Lily bulbs one dollar,'" and Millie pointed to that paragraph as she read it; "Seven," a long drawn breath of longing delight, and Millie's eyes ran over the bright hued pages. "Tulips, a hundred for two dollars, mixed bulbs," she ejacu. lated; "scillas, ornithogalum, and every bulb I ever heard of and 'countless thousands more," and Millie tossed the catalogue and her bright visions aside and took her pretty bit

of fancy work, which she loved next to the living flowers themselves. This piece of work was a very handsome one, of Honiton lace braids and silk embroidery. Millie did beautiful work, for we are apt to do those things best that we love best to do. Daintily she drew her thread of Honiton lace silk from its holder and threaded it into her needle, carefully every stitch was set, and with such nicety that the completed work was beautiful to behold.

Mina watched the light fingers working deftly with the soft silks and lace braids, and noticing the rest of the pattern, an elaborate one of wild roses and leaves, she said:

"And Millie, are you going to embroider all those flowers too?"

"Oh, yes; I love to do it, and I have time these long, lovely days. I like to have some pretty work to do after the heavy work is over, and mother has always tried to get the materials for me; you know we sell lots of butter and eggs and I have my share for helping with the work; sometimes I choose my pretty Asiatic embroidery silks and linen to work on, rather than some bit of finery for myself. It is such a delight to see the flowers grow under my fingers," and the young girl smiled brightly, having half forgotten her longing of a moment before for the real floral treasures.

"And did you ever sell any of your pretty work?" queried Mina.

"Sell it?" ejaculated Millie, laughing merrily, "and to whom should I sell it? Mrs. Myers, on the hill, who cares more for a patchwork quilt than the most exquisite embroidery,

or to Bachelor Bill who lives in that pretty cottage yonder? 'They say' he has lots of pretty things in his house, but very few ever get inside to behold its beauties," and again Millie laughed merrily at the mere idea of selling her fancy work in that country neighborhood.

"Now, do be serious, Millie," Mina said.
"Really, many women and girls in the cities earn quite a bit making just such pretty work as this of yours. You have heard of the Women's Exchanges, haven't you, Millie?"

"Oh, yes, I've read something about them, but never thought much of the work."

"Well, if work is done beautifully, exqusitely, like yours is, it always commands a good price. You would be surprised to go into some of the art stores and price work of this kind—the price is more than you would dream. I believe if you would show your work at a fair or something of that kind and let it be known that it is for sale, you might not only enjoy yourself in its construction, but really benefit yourself as well. You might get a good start with the bulbs you want so much, and when once started you would find it growing easier all the time to sell your work and get the things you are always wanting."

"I could in time earn enough for the painting lessons I have longed for in vain."

"In all probability you could, and do many other things of which you have not now even thought."

It was not long after this that Mina returned to her home in the city. She took specimens of Millie's needlework and after showing it to her friends, she took it to a fair and it was sold for quite a good sum of money. Yet those who bought the work thought it very reasonable in price. Mina also learned that the lovely, soft Asiatic silks, that wash so perfectly and possess such a rare lustre and beauty, could be bought much cheaper in the city than in the place where Millie had secured hers, and now that Millie had real money to spend instead of just butter and eggs to exchange, she could invest it as she choose and just where she pleased. The first thing, however, that she bought after laying in a supply of material for her art needlework, was a good lot of bulbs. She studied the catalogues over and over and then made out a list carefully, trying to select those that she hoped would do the best with the care and culture she would be able to give. She loved callas and she bought three big bulbs; these were potted in good rich soil, putting all three together. There were hyacinths, crocus, narcissus, tulips and a number of smaller bulbs. She did not buy many of one kind, for she wanted a variety and also to try different kinds. How Millie watched those bulbs, and how they grew while she worked gaily about the house, tending the baby, or sat with her lovely needlework to catch the best light for the dainty stitching. She did not sell all of her work, for she had friends to remember at Christmastime and on birthdays, but Mina had opened up to this country girl a new avenue of happiness and Millie walked therein, with gratitude to her helpful cousin. Little by little Millie gained in her sales, and then, too, she found people who had used her work noticed how well the colors washed and

wanted to get silks like those she used, so that after a time she established quite a little run of trade in selling these wash silks and art fabrics.

In the wintertime she had her flowering bulbs -quantities of Chinese lilies, hyacinths, crocus, etc., and about Christmas time these were placed in the window in town, and found ready sale. Through this work, and her needlework, Millie found means for the painting lessons she had longed for, and is now getting ready to go to college. She has not been selfish with her self-earned money; Millie has been ready to share with her brothers and sisters, and to do all the duties that life has held for her. She has worked faithfully in her chosen line, and expects to go on with the good work, at least the selling of blooming bulbs, even when in college; they require so little work, and she will live with a friend of her mother's who has promised room for the flower growing. She gets her bulbs fresh every fall for forcing from well known florists, and gets the best, and so is sure of good results: then her natural love of the work helps her a great deal. She is busy and happy, and she hardly knows which she holds dearest in her heart, the lovely real flowers or those made from the soft silks growing under her light fin-

It is curious how most of us do without and go without things for which we long most earnestly, when if we would only push open the door of our resources we might encompass the things that will broaden and beautify our lives. So many young girls are longing for a college education, longing for music or painting lessons that the contracted purses of parents cannot supply, although the love of their hearts would do so if they could. Why not try and do something for yourselves, girls; have you not some work that you can do, some special line of work that you love to do, and in which you might succeed and so go out of the narrow life you now live into one broader and better? Not that home life is narrow, or ever can be if lived truly, but we all have talents in reserve and it is our duty and privilege to cultivate these as well as ourselves. Let us look high, aim high, and then if we fail of the mark it is better, far better than never have tried at all.

Rose Seelye-Miller.

MY SUMMER FLOWERS.

WANT to say a few words in regard to my summer flowers, those lovely little messengers of Faith and Hope whose smiling faces ever rise to our own full of sympathy, cheer and love. The only beautiful things that are never out of place.

They festoon the hillsides, sprinkle the lawns, gleam in the meadows, and brighten the valleys. Filling the palace with their odorous breath, wreathing the cottage or clambering over the crumbling wall, they are equally in place and no matter how desolate the spot would otherwise be, they lend a charm to the surroundings, and with unpropitious environments making the best of their advantages, are a constant surprise and delight to us.

In the sick room a growing plant is a health inspiring messenger. 'Mid want and poverty, they come like angels of mercy, and few there are who do not appreciate the gift of a newly cut bouquet when given by a kindly hand,

Flowers are refining in their influence, let us then be generous with what with time for culture and good soil we have been successful in raising, not alone to our equals whom we are not apt to forget and from whom we may expect similar returns, but to the stranger who may pass within our gates, to the poor whose days are full of weary toil and to the unlovely whose lips never learned to fashion words of gratitude for small favors. Aye, it is a little thing which may bring splendid results, for whether you see them or not your efforts for good will never be wholly wasted.

Owing to illness in my family my own flowers were planted late and on account of drought were tardy in blooming. They were watered but not with the same success that follows nature's hand, still with patient and loving care, my sweet peas, petunias, nastutriums and verbenas are a perfect show of bloom, not to mention my geraniums and other plants blooming less profusly, while my vines hang in the most luxurious festoons. My begonias (I have only three varieties) a tuberous species, an "Argentea guttata" and a "Rex;" the first named is a perfect marvel. It was almost summer when it came to us a tiny little tuber looking more like a nice barn mouse than anything else. We placed it in a four inch pot, putting in a few pebbles and broken crockery for drainage and filled with good, rich loam mixed with sand. It now has five fully developed leaves, two of which measure six inches from base to tip and four and a half in broadest part, and is putting out its first set of blossoms.

My argentea potted the same manner was in bloom when it arrived; has grown splendidly, and as described in catalogue, is a constant bloomer. The Rex I valued most, the beautiful well developed Rex, did not take kindly to my treatment. Perhaps in my ignorance I strangled it with too much water, as I am told the leaves must not be wet, only the earth around them. It was seriously injured in transportation and perchance I should have clipped the stalks and left the root to furnish more. This I did later, too late. There is only a spark of vitality left in the root. Can we nurse it back to health again is a question to be aswered only by time.

Have five varieties of cannas, sturdy and with their tall spike richly set with blossoms which are a perfect delight. I would here say, if all who purchase flowers are as successful as I have been, they will never have reason to complain of the sender.

M. J. M. S.

THE DWARF CANNAS.

These plants which were introduced but a few years ago, as the result of successful crossing of seedling varieties, have done much by their introduction to beautify our grounds in summer. Everywhere they are being employed for bedding with most satisfactorily results. The parks and squares of our cities employ them largely and they are coming into frequent use on all the best kept private grounds. New varieties are being brought out every year, but a few kinds already well disseminated are likely to retain their popularity. The judicious use of these plants in various ways adds greatly to the beauty of our gardens and lawns.

A WINTER WINDOW GARDEN.



winter blooming and find them so satisfactory that I would like to recommend them to the trial of others. Many people in country houses do not keep fires always, they mean to—but sometimes the fires go down and the mercury at the same time, and this results disastrously to the pretty greenhouse plants that have been so carefully cherished for many months, mayhap.

Now the hardy bulbs make ideal plants for just such people and just such country homes, where furnaces are unknown and while comfort and good fires abound usually, they are fallible and sometimes the fires get so low that frost creeps in unawares and nips everything available, even to pink tipped buds and full blooming plants. First on the list comes the hyacinth, and never before were such choice bulbs sold so cheap as they are this fall, the purse may be small and not very full at that, but quite a show of bulbs may be had for a small sum. You need not spend any money for pots unless you want to, and although I use pots for all other plants I like boxes best for bulb growing, and I like my bulbs best in a good sized box, all together, in a sort of a garden like. A common box, rough pine if it happens to be so, will answer every purpese. And where the bulbs are brought to the living rooms you can take a piece



of common crash and fringe one edge, make a little border above this fringe with Asiatic twisted embroidery silk, or Boston art silk, in cross stitch or feather stitch, and this will wash and wash and do for several winters. This little drape you can tack along the front edge of your bulb box, and make it quite presentable. I should not do any elaborate work on the crash, or any showy work in colors, just a waving line maybe of feather stitching, with branches, or

sprays springing from either side in a graceful way, let the colors be quiet, not to detract from the beauty of the bulbs when in bloom.

Put a lot of broken crockery, or hard coal clinkers in the bottom of the box, adding some bits of charcoal to keep the earth sweet and wholesome for the feeding of the rootlets that may find their way down near to it. Indeed some think that charcoal adds to the beauty and brilliancy of the flowers, and maybe it does. Fill the box up with good garden soil, I don't advocate putting any manure, however well rotted, into the earth, I prefer adding a liquid fertilizer after the bulbs are well started, this will answer ever purpose, and I think bulbs are less apt to be infested with black flies, white worms, etc., etc., if the soil is purely good garden earth. Now having prepared your box, (let the earth be just moist enough to be loose, and not wet and soggy), take your bulbs and arrange them to suit yourself, cover well with earth, and tuck this brown blanket well around them, put them away in a dark place for six or eight weeks and then bring to the light, and you will not have long to wait for flowers. If you are in a hurry for them, when the bulbs arrive soak them well in tepid water for twentyfour hours, before setting them out, then maybe it would do to bring to the light in about four weeks, keep cool, and look out for the green aphis, give him a good spraying with tobacco infusion on his first appearance, and keep it up until it is thoroughly routed, sprinkle tobacco stems and leaves upon the surface of the soil in the start and maybe you will need do nothing

Now about the kind of bulbs. The hyacinth is certain to bloom and do well, but it costs more than some other bulbs, still I hope you will have a few of these. You can buy a dozen mixed bulbs for a small sum, supposing you get only three, and half a dozen Roman hyacinths, a dozen scillas, a dozen alliums; to make up the collection add a dozen crocus, and a dozen oxalis bulbs, Lutea major, or three freezias, or some narcissus; with these we shall be able to have an excellent display of flowers for a long time, and the cost is very little. But, after all, instead of making my own selection for a general assortment for the house I think the dollar collections which are offered are the most complete, contain the greatest variety, and prove more satisfactory than any selection the amateur can make for the same amount of money.

Now in buying bulbs for forcing, get those that would naturally bloom early in the garden, these will give far better satisfaction than the late blooming varieties, as these will not come into bloom in the house much before spring, and so will not give as much pleasure as those that will bloom in midwinter. I believe the allium should come into bloom quite early, somewhere near the holidays if potted early; scillas are also early bloomers, and very pretty flowers indeed, and are excellent for out of doors as well as indoors, as in fact most of these bulbs are. The Roman hyacinth blooms early, and its flowers, while not produced in such large spikes as are those of some other varieties, are very graceful and a number of flower stalks come to each bulb. The flowers are also very fragrant and remain fine for many days.

I want to speak a special word for the crocus, it is such a dainty little flower for winter blooming. I had a lot of them last winter for the first time in the house, and they really surprised me, in their beauty and floriferousness. Of course the crocus is not adapted to cutting, but it is a charming little flower in the window box, and I never mean to omit it from my list of bulbs for winter blooming.

Freesias are the very sweetest of all flowers, and



FREESIA.

these are good from year to year, and need not be disturbed at all unless you wish; they will die down in due time and spring up in the fall again; this is also true of the winter blooming oxalis, Lutea major, this is one of the most graceful of bulbous plants and increases rapidly.

ROSE SEELYE-MILLER.

CHEAPER ALCOHOL.

The Popular Science News says that the recent discovery of Mr. Wilson, of acetylene gas from lime and coal dust treated with electricity from carbon electrodes, has made it possible to produce ethyl alcohol so cheap that all other processes will be abandoned. Should this discovery prove to be what is expected, alcohol will be made for two or three cents a gallon, or even less. It uses in the arts will be largely increased, and as a beverage it could be cheapened to an enormous extent. The occupation of distilling will be superseded, and the manufacture of whiskey and other alcoholic beverages will change, and the great problems which centre around them commercially, scientifically and socially, will have new features.

PARSLEY eaten with vinegar will remove the unpleasant effect that onions have on the breath.

THE maximum age assigned to the oak is 700 years; to the red beech, 245; to the ash 145.

WEST INDIA EMMIGRANTS.



wonderful agency of the Gulf Stream—that river in the midst of watersas a distributer of plants and seeds from the West Indies to the coast of Florida. As is well

known, the Gulf Stream, after sweeping along the shores of Central America and the islands of the West Indies, passes through the Florida Straits, between Key West and Cuba, and then turns northward between the southeast coast of Florida and the Bahama Islands, and runs quite near the shore of Florida, as far north as Lake Worth, where it gradually recedes from the coast until at Cape Canaveral it strikes across the Atlantic Ocean for the shores of England. A great many tropical trees of the West Indies and Central America grow overhanging the water, and as the fruits ripen and fall, they are carried by winds and tides until they are finally washed into the current of the Gulf Stream and are carried far north; other trees, and plants not growing near the coast reach the sea by way of numerous rivers.

Now, as every one has noticed who has crossed the Gulf Stream in southern latitudes, the water is full of all sorts of debris, and this floats around and is drifted and blown about by the tides and winds until finally it may be washed on the shores of some island or land where, if the climatic conditions are favorable and the seed still retains its germinating qualities, it sprouts, takes root and grows, and in time becomes acclimated, produces fruit and scatters seed which in turn grow, until in time, the descendents of a single seed may form a large forest.

Thus we see an explanation of the manner in which great numbers of native trees, plants, or flowers of the West Indies have been transported to the extreme southern shores of Florida -immigrants from a foreign land, which have taken root on the once bare coral rocks and stretches of sand and transformed them into forests of dense and luxuriant vegetation. While examples of this immigration of West India plants to the shores of Florida may be found in almost all parts of the state, at least near the coast, yet the most striking example of it is to be found in the extreme southern part of the state, especially on the extreme southeastern coast, and the Keys in particular, where the vegetation is nearly all plants or trees to be found native in some parts of the West Indies or Central America. I have already related in a former article that fully nine-tenths of the vegetation here was not to be commonly found in the state north of Lake Worth, and that I only know of two species of trees known in our northern latitudes. I shall, for the benefit of my readers, endeavor to describe some of the most notable West India plants to be found here: to describe them all would require a large volume. Of palms the most noted is the "Royal" palm, Oreodoxa regia, erroneously called cabbage palm by some writers, which is the O. oleracea-formerly found in considerable numbers on the shores of Biscayne Bay, but the trees have been gradually destroyed for aria); it is quite ornamental with luxurant light

canes, etc., and even to make hog troughs, by the unappreciative settlers until only one tree is known to exist on the Bay; it is forty or fifty feet in height, and grows in a dense swampy hommock, at the mouth of Little River near the upper end of the bay. Of the superb beauty of this palm I will say little, as it has often been described, but it is not known generally that the wood is one of the most beautiful in existence, mottled, veined and striped with the richest brown, black and yellow, in an indescribable manner, and takes an elegant polish, and is almost as strong as iron. I have a cane, made out of a stick of one of the finest trees ever found in Florida. There is a grove of large trees at Cape Roniano on the west coast but it is only a question of a few years when all the old original Royal Palm trees in Florida will be extinct. Another beautiful West India Palm, found growing on the extreme lower Keys is the Prickly Thatch, Thrinax parviflora; this is a very beautiful fan palm with graceful slender stem and very beautiful leaves, rarely found over fifteen feet in height in Florida. Another rarer and larger species is the T. excelsa. Of hard wood trees there is a great number of species-more than is to be found in any area of equal extent in the United States. One of the most remarkable of these is the Lignum v itæ, a large beautiful tree, the wood of which is perhaps the hardest of any known. I saw a tree belonging to Mr. Henry Filer, of Elliotte Key, that was cut for the purpose of sending a portion of the trunk to the Cotton Exposition at New Orleans, and I was informed by Mr. Filer that he utterly ruined a new axe and saw, and spent a hard half days work in getting a piece cut off large enough for exhibition. The Mahogany (Swietenia mahogany) is also found on the Keys, though of comparatively small size. The flowers are white and are very pretty: the young plants flower freely while small, and make very interesting and beautiful pot plants. One also finds in the hommocks, very rarely on the main land but more common on the Keys, the rare and beautiful Satin Leaf, Chrysophyllum oliviforme, a small bush or tree, with the grandest foliage of any tree native to Florida; the leaves are somewhat the same shape and size of an orange leaf, of a rich glossy green above, and the richest satiny bronze on the under side. A well grown bush of this presents a grand appearance when seen on ornamental grounds, especially when the leaves are stirred by a light breeze. Another beautiful tree is the Mimusops Sieberi, the wild sapodilla, which bears pleasant fruit. Perhaps the largest of the West India trees in South Florida is the Mastic; it attains an immense size in the rich rocky hommocks of the mainland, and is a very beautiful tree, and furnishes valuable wood. It bears great quantities of yellow fruit about one inch in length, with a large brown seed in the center. The fruit has a pleasant flavor, but owing to some caustic principle in the juice, it will make one's mouth and tongue sore to eat many of them. The Bahama people remedy this by placing the fruit for a few minutes in boiling water in which some salt has been placed. Another curious tree is the Soapberry (Sapindus sapon-

green leaves, very odd and distinct in shape. lanceolate, with winged petioles; the berries are produced in long clusters, are of a pale yellow color, and about the size of gooseberries with a very glossy and hard seed in the center, which in tropical countries are made into rosaries and various articles of ornament. But the most wonderful thing about the berries, is that they possess to a remarkable degree the properties of soap, and are much used instead of that article, in some tropical countries. The native calabash, Crescentia cucurbitina, is a wonderful tree, with large luxuriant, and glossy foliage, and its odd and curious fruit hanging from every branch. The fruit is of a somewhat oval shape and about the size of a Netted Gem muskmelon, perfeetly smooth and with an extremely hard shell; as it hangs from the limbs by a long slender stem it presents a curious sight, swaying back and forth in the breeze. This tree would make a fine potshrub. The Manchineel (Hippomane manchinella) is also found; the bark of the tree somewhat reminds one of that of a young persimmon, and on cutting it a thick black juice oozes out which soon hardens; the fruit is black and produced in racemes. I made the acquaintance of the manchineel the first few days I was in Dade County, in rambling through the thick hommocks and in some manner happened to get some of the juice on my face, though I did not know it at the time, and the next morning I looked worse than the defeated champion of a prize fight and for more than a week I could not see out of one of my eyes, my face was swollen so, and the flesh felt as if on fire. I suffered extremely and for two or three years afterwards at the same time of year, the symptoms recurred, only in a much milder form.

MARTIN BENSON.

NOTES ON A FEW PLANTS.

The Japanese Mayberry proves to be not hardy in this region, not even on Long Island. It is adapted only to the south, whatever may be its value there. It will probably pass out of public sight as rapidly as it was brought to view.

Rosa Wichuraiana, now called R. luciæ, is a very strong growing, hardy plant, with beautiful shining foliage and blooms all through July and August; flowers pure white, single, from one and a half to two inches in diameter. Very valuable for training over rocks and embankments, and will be much employed as a cemetery plant for training over graves. It makes many shoots, forming a close mat over the ground of its glossy, shining leaves. It can, also be trained up over arches and about pillars; a valuable plant.

Caryopteris mastacanthus - This so-called Blue Spiræa blooms very freely planted out in the garden; the small bluish flowers are formed in a spiral cluster around the ends of the shoots in the form of a bottle brush. It is interesting, a member of the verbena family, and should not be called spiræa.

Strobilanthes Dyerianus proves to be satisfactory as a foliage plant for bedding, and it will probably come into general use for that purpose. When left to grow and not pinched back it produces its handsome blue flowers.

MY LITTLE BROWN SEEDS.

Some brown seeds came from a distance And begged me to give them a home. To the untrained eye no beauty Had sent them abroad to roam, But under each wee brown cover The soul of a blossom slept-The spirit of beauty,—hidden Secure from intruders kept.

With a love for the tiny fellows, I gave them a corner lot Fenced in with a wall of pebbles, In a most delightful spot, And fashioned for each a dwelling Quite close to nasturtium town, And coverlets for each wee bed I matched with their chosen brown.

Lovingly close I tucked them Into their tiny cots,
Gently as would a mother,
They were such little tots; Then as the skies forbade them Draw from her upper wells, I gave them as often as needed The water that thirst dispels.

Patiently waiting their waking,
I longed to see them arise, Wearing their summer garments Under the sunlit skies One bright morning I found them Peeping outside their door, Fresh from their naps awakened Crossing each threshold o'er.

Then they grew strong, and greetings Gave every morning I came, With a new growth of beauty My whole attention to claim. Then there were tiny off-shoots,
Close folded buds to swell,
And of all their bloom and sweetness
I never, never can tell.

Fragrant and soul inspiring,
Ever a message they brought;
Never a hint of discord
Into their smiles were wrought.
Silent and true companions
Gifted with this rare grace,
Wherever, when plucked, we put them
They never seemed out of place.

Some went to a sick man's palace
And drooped o'er a golden rim,
Some went to a lowly cottage
And bent o'er a cheaper brim;
Some went to a hovel lonely,
Where a sick soul needed cheer,
And their faces beamed as brightly
As those in the gilded sphere.

The little Italian pedler,
Who sells me his fruits and wares,
And even the shiftless beggar
Their bounteous blessing shares,
And yet I am none the poorer,
For see how they bud and bloom;
Each morning I think more lovely,
More fragrance in their perfume.

Casting pearls before swine? It may be Sometimes they are Folly's dower, But shall we amid such beauty Grudge giving to any a flower? Since God overlooks our short-comings, And showers rich gifts at our feet, We cannot withhold small favors, Or sit in the judgment seat.

M. J. MEADER SMITH.

THE POLYANTHUS NARCISSUS.

THE genus Narcissus is a very extensive and remarkable one, from its novel diversity of types and colors. It includes the well-known jonquil, daffodil, and that most beautiful section known as the Polyanthus Narcissus. The varieties of the Polyanthus Narcissus have been favorably known for many years as excellent plants for the mixed flower border, while the Paper White and Double Roman have been extensively grown by commercial florists for their flowers, which are used during the winter season in cut flower work. Now, however, they are rapidly becoming a great favorite with our amateur cultivators for window garden, greenhouse and flower border.

The flowers of the Polyanthus narcissus show, in the different varieties, many shades of color, from pure white to deep orange, and are produced in clusters of six to ten; they possess a most delightful fragrance and on this account are highly prized. They are easily grown and

require no particular skill or care to grow them, and the bulbs can be potted at any time from October to January, but it is well to place them in the pot as early as possible. In potting use pots proportionate to the size of the bulbs, and as these are quite large a single bulb will requre a 4-inch pot. Let the pots be properly drained and use a compost of two-thirds turfy loam, one-third well decomposed manure and a good sprinkling of sharp sand; mix well and use rough. In potting fill the pots with soil to within three inches of the top, then set in the bulb, and fill with soil within half an inch of the top. Water thoroughly, and then place in a dark, cool cellar to make root, giving water whenever it may be necessary. In about six or eight weeks after planting, or as soon as a vigorous top growth sets in, they can be placed in a light, sunny situation, where an average temperature of 55° is maintained, giving water freely, and us much fresh air as possible. Keep the plants free from dust, and remember that the flowers will last for a long time if placed in a cool temperature when fully expanded.

blooming variety with very large, perfectly double, fragrant flowers; clear white with small petals of pure yellow.

Gloriosus-Has splendid fragrant flowers; pure white with deep orange-colored cups. One of the best and most distinct.

Grand Soleil d'Or - The flowers of this variety are produced in large clusters. In color they are of a deep yellow with an orange cup.

Paper White—(Totus albus grandiflorus.) Is a new variety of very robust growth and an early bloomer; the individual flowers are very

Staaten General-Is a grand sort with large

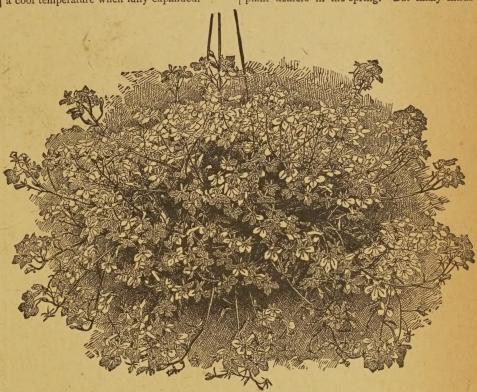
clusters of white and orange flowers.

White Pearl—(Louis le Grand.) The exquisite flowers of this species are pure white with a sulphur-colored cup.

CHARLES E. PARNELR.

BASKET AND VASE PLANTS. LANTS for baskets and vases are raised in

large quantities and offered by florists and plant dealers in the spring. But many kinds



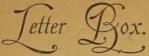
BASKET OF LOBELIAS.

After the flowers begin to decay remove the stalks, and as soon as the foliage commences to turn yellow, gradually reduce the supply of water, and remove the plants to the cellar, or else place them underneath the greenhouse stage. Here they can remain until the weather becomes settled, when they can be planted out in the flower border either for good or to re-main until fall, when they may be potted for another winter's use inside.

When grown in the mixed-flower border the Polyanthus Narcissus should be given a very deep, well enriched soil, and during the winter season should be hoavily mulched with some coarse material; this mulch should be applied early in December and removed towards the end of March. In the border the bulbs should be planted about four inches in depth and in groups of five or six, keeping them a few inches apart. They do best when planted in October. The bulbs can be purchased in mixed colors or named varieties; the former do well inside and when planted separately in the flower border, but when the very best results are desired it is advisable to procure the named sorts, especially as they can now be obtained at a very moderate cost. The following descriptive list embraces the most desirable varieties:

Double Roman-This is an early and profuse

can be quickly raised from seed with a little care. Among the best for this purpose may be named the following: Maurandya of several varieties, Thunbergia Bakeri, T. alata of different varieties, and T. aurantiaca in different colors. The Lobbianum varieties of Tropæolum majus are particularly desirable; Fenzlia dianthifora is party desirable and not common. dianthiflora is very desirable and not common; Nierembergia gracilis is a very pretty, graceful plant with handsome flowers; Torenia Fournier; and T. Bailloni are excellent for the purpose is sweet alyssum is always serviceable. The annual varieties of lobelia are excellent basket plants, and easily raised from seeds. There are varieties of different shades of blue, dark blue flowers with a white eye, as well as wholly white flowers. The lobelias are almost invaluable for vases, baskets, carpet bedding, edging, They should be raised every season, sow ing the seed early in the house, and getting plants strong enough for setting out when the weather becomes settled in spring. The mimulus is an excellent basket plant and can be had in a number of fine varieties. Nolana is an excellent, free-blooming, graceful trailing plant of easy growth. Many other kinds which can be raised from seed can be employed to advantage as basket and vase plants.



In this department we shall be pleased to answer any questions relating to Flowers, Vegetables and Plants, or to publish the experiences of our readers. James Vick

Nasturtiums.

My dwarf nasturtiums are beautiful and have bloomed profusely all summer. I bought them of you last spring. But how shall I get seed? Not one has formed yet.

Orleans, Neb.

We expect to have a superior quality of Nastartium seed for spring planting, and probably can supply all who may order.

Rosebush.

Some time ago I bought a Seven Sister rosebush. I watered it and put some well rotted manure around it. It grew well for about two months, then it stopped growing and has not grown any since. Will you please tell me through Vick's Magazine what is the matter?

Davenport, N. Y.

It probably made its growth for the season and ripened its wood in August, ceasing to grow on account of the heat and dryness. It is all right and will probably start a new growth next spring.

Heliotrope.-Iris.

I would like to have G. M. O., page 158, try my way with beliotrope and see if she does not have better success. I took a glazed pot that held about two quarts of earth, placed a bit of broken pot over the hole in the bottom, them put in a good, big handful of charcoal, then filled with rich, light soil nearly to the top, stuck in a good, healthy slip about an inch long, watered well and set in the shade to root. I paid no more attention to it, only to water it until I brought my plants into the house in September, then it was a nice, thrifty plant five or six inches high; it soon commenced to grow very fast and to bloom freely; before spring it was more than four feet high with dozens of branches and blossoms or buds at the end of every branch. It was, indeed, "a thing of beauty" all winter. I had clusters of the fragrant beauties to give to nearly every friend that called. I think one secret of success is plenty of water and good drainage. Once drying out spoils the plant.

think one secret of success is plenty of water and good drainage. Once drying out spoils the plant.

I have a little of the old-fashioned iris that my mother used to have in her garden forty years ago.

I think it is the same that Mrs. V. N. wishes to get. If she will send her full address to box 379, Allegan, Mich., with stamp for postage, I will send her some.

Bulbs in the House.

I tried bulbs in the house for the first time last winter. Paper white narcissus gave me from thirteen to eighteen blossoms for every bulb, and one bulb threw up a second stalk of eight blossoms; one double narcissus gave me four blossoms; tulips blasted; iris blasted; Allium Neapolitanum bloomed beautifully—a large cluster for every bulb; Ornithogalum Arabicum gave me ten large blossoms; chionodoxas were quite pretty; Scilla Siberica blossomed too close to the ground; anemones and ranunculus did not come up; three crocusses blossomed, three blasted; Cockade Hyacinths blasted, but the single hyacinths were beauties. The most of my bulbs I placed in the cellar after potting for a month or two, but three Paper White narcissus bulbs I planted in one pot and buried the pot in the ground for about a month; when I dug it up I found the roots growing out of both top and bottom of pot, so had to shift to a larger one; those put in the ground blossomed three weeks quicker than those in the cellar and had more blossoms, one bulb sending up the second stalk. I find that narcissus will bloom beautifully in a high temperature, but will not last very long, while tulips and crocusses want to be kept as cool as possible without freezing. Ornithogalum Arabicum does not mind what you do with it—will grow anywhere.

Mrs. C.

Water Hyacinth.

Will you please tell me through your Magazine how to care for the water hyacinth through the winter, also what care it should have to make it bloom. I bought one of you last year, and it grew so fast that before fall it filled a large tub and grew out over the

sides, but did not have a single blossom. The tub was half filled with rich, black muck and stood at the south side of the lhouse in a warm, sunny place. I tried to keep some of it through the winter by putting it in the tub with my water lily and covering it with leaves, but it was dead in the spring. I tried to keep one in the house, but that met with an accident too, so that I did not have a fair chance, but I know of a dozen or more persons that lost theirs. I think others will be glad to learn how to care for it as well as myself, for it is a very popular plant.

Mrs. C.

Allegan, Mich.

The water hyacinth, needs only to be kept warm in water with a mud bottom. It is now planted out in the spring on the margin of ponds in parks and private grounds in this state, and left to itself. Under these conditions it grows rapidly and produces its flowers all through the summer. It must be kept in the house where it is warm during winter.

Spring Starflower.

Triteleia uniflora is a bulb which I think would be cultivated more extensively if better known. Some three or four years ago I had three small bulbs sent me in a collection. I treated them like my other bulbs. They came up and grew and finally had three or four little blossoms about an inch across. I didn't think they amounted to much. I let them stay in the pot all summer and they never received much attention until last fall. I shook them all out of the pot and there were five bulbs about as large as the end of my thumb and, twenty-five or thirty small ones. Having read that they are hardy I planted these small ones out doors and the five large ones I potted. There being roots on them and the sprouts all ready to start I placed them in the window at once, and actually they were all five peeping out of the ground the next day. They grew so much more thrifty than ever before, the leaves being nearly twice as wide, and in January they commenced to bloom, and from that time until in March there were blossoms on them nearly always—five or six at a time and sometimes seven or eight, each blossom lasting nearly aweek, there being thirty in all. The blossoms, which are white tinged with blue were fully two inches across and very fragrant, scenting the whole room, although when they get old they smell very disagreeable, but they should be picked off as soon as they commence to fade. The ones I planted out, although so small, gave me four or five blossoms this spring.

MARY B. R.

Rome, O.

Wire Worms.

Please inform me how I can get rid of those worms which I call dobisons, specimens of which I enclose. They are in the ground, where I have my celery bed, and they gnaw the celery and cause it to die, or at least I think they do. It may be grubs, but I am inclined to think that these worms are the cause. Please tell me how to exterminate them and not hurt the celery. How would weak lye be to use on the plants?

D. V.

Lowville, N. Y.

Wire worms usually infests pasture and meadow lands, feeding on the roots of the grass. The first year such lands are put under the plow the worms, being deprived of their usual food supply, are apt to attack the newly planted crops. They are often caught by poisoning some kind of succulent herbage, such as clover, lettuce and cabbage leaves, and laying these about the ground. A mixture of Paris green in water is used to dip the trapping material in. In the very practical work on insects, called Injurious Insects, by Frank W. Sempers, the following instructions are given:

An English practice is to sow along with the seed bits of rape-cake soaked in arsenic. Poisoned corn harrowed in shortly before planting the regular crop would probably answer the same purpose. Autumn and early spring plowing with frequent harrowing expose the worms to birds, which are our ever constant but little appreciated allies in combating formidable insect pests. Professor Garman in the bulletin

above quoted says: "In fields recently in sod it is not possible to avoid all injury from wireworms, but the planter may avoid some loss perhaps by putting such land in the crops least subject to injury, such as hemp, tobacco, or wheat until the worms have disappeared. A fact of considerable importance in this connection has recently been made out by Professor J. H. Comstock, of New York. He found by experiment that the wire-worm pupæ die when the earthen cells in which they lie are broken. This fact has suggested the expedient of ploughing up infested lands in the fall of the year so as to expose and destroy the pupæ. A method sometimes practiced in gardens, is to thrust sticks through pieces of potatoes and then bury thesc here and there in the ground which it is intended to plant, leaving part of each stick exposed to find them by. The bait is then taken up at intervals and the worms which have been attracted to it are destroyed. The method has of course no great value as a means of ridding large fields of wire-worms, but it is said to be quite effective for the small plots of gardeners.'

INSECT, FOES AND FRIENDS.

Some idea of the immense loss that is sustained by the human race from insect pests may be imagined from the fact that in 1884, in the United States alone, the amount is estimated to have been \$400,000,000, but in 1891 it was \$300,000,000, and, thanks to the investigation of German scientists, it is believed to be annually decreasing. It is not to be supposed, however, that the fullest knowledge available to man will suffice absolutely to prevent these losses; but these figures are so enormous that the reduction of them within smaller dimensions becomes a matter of very great importance. All insects are not our foes; and just what birds are most fond of beneficial insects it would be interesting to be informed. But we are somewhat in the dark about this even yet. Professor Panton, of the Ontario Agricultural College, gives a list of a few insects which are our friends:

Syrphus fly, trachina fly, tiger beetles, ground beetles, lady-birds, reduvius, soldier bugs, lacewinged flies, wasps, cuckoo flies, and ichneumons.

These insects are said to be of great importance in keeping the mischevious species under, the icheneumons being especially good at this business. They prey on certain grubs by depositing eggs on their living bodies. When these eggs hatch, the young worms feed upout their host till the latter can stand the strain no longer and forthwith dies. About this time the ichneumons are ready to fly as perfect insects. It is no uncommon thing to flnd on a tomato or tobacco plant one of the large green worms which infest these plants, with a dozen or so small whitish thorns sticking into its hide. These are the ichneumon egg which eventually kill the worm. Ladybirds feed upon plant lice; ground beetles are said to prey upon the potato beetle and various kinds of catepillars while the tiger beetle will eat almost anything in the insect line.—Public Opinion.

THE BOOK OF THE FAIR.

Parts twenty and twenty-one of this beautiful series of the World's Fair representations are mostly filled with engravings showing the state exhibits. These are particularly attractive and interesting. Part twenty also commences the scenes in the Midway Plaisance. Four more parts will complete this great work as history and art descriptive of the Columbian Exposition. This is the only full record of the great show, and should be treasured as its final glory. Published by the Bancroft Company, Auditorium Building, Chicago, Illinois.

HELIANTHUS MULTIFLORUS.

PINCHED by drouth and beset by fast thickening ranks of perennial phloxes, my only dahlia sunflower or Winter Dahlia as it is variously called hereabout failed to flower last year; its one or two poor little buds died unopened. So in late autumn I reset the root—much smaller than it had been, upon a new bed giving it plenty of room, covering it with fine manure as winter came on. (I am not sure of its real need of winter protection but the manure is of use the next summer). This season has been more favorable and I have hoed around the plant now and then. It now stands six feet high and has borne ninety-seven flowers September 2nd and possibly a greater number now;



HELIANTHUS

a great golden bouquet from July till frost comes. The promptness of its recovery under its new conditions shows the ease of its cultivation. It is indeed a plant for the million. Its common name describes its general effect from a distance but no dahlia is so floriferous, no yellow dahlia that I ever saw is so bright. I noticed a residence in the village which had a narrow border close to the foundation wall the whole width of the house full of it, the plants being from two to eight feet high, all in full bloom; I do not now recall any plant which would have been more showy in the same place. It has no seeds, but can be rapidly increased by dividing the root in autumn which is the best time to order it from E. S. GILBERT. the seedsman.

A POUND OF SWEET PEAS.

THIS spring, when I read in Vick's catalogue, "A pound of sweet peas for forty cents," I felt as if a legacy had been left me; for never in my life had I been able to buy all the seed I wanted. It has always been impossible, too, for me to save any seed, for every summer as soon as my peas bloomed, it was a question whether "to have my pudding or eat it," for if the blooms were picked there would be no seed, if they were allowed to seed they would stop blooming and,—the blooms were invariably picked.

I was a little late in sending in my order; before the seed came every bit of ground in my

flower garden was pre-empted so I took a hoe, little five-year-old, and the seeds and went to the vegetable garden; about half of it had been planted, so right through the center of it I made a trench about four inches deep, then, the little maid helping, we began to plant seeds, not more than an inch deep and five or six inches apart, for the seeds were so round and plump that every one was sure to grow. We planted about a third of them, when my little helper said:

"Granma and Auntie ought to have some of these seeds, we have so many."

Very true, thoughtful little five-year-old! A row about sixty feet long had been planted and we stopped right there, made two packages of the remaining seeds and sent to "Granma and

Auntie."

As soon as the peas were three or four inches high the dirt was drawn up around them until the shallow trench was full and as they grew the hilling up process was continued, until it was time to bush the vines. Now (August) the vines are more than four feet high, rank, luxurant and full of blossoms.

Every evening we go out and pick off the beautiful flowers by the basket full. There are not only sweet peas for every room in this house, but sweet peas for church and kindergarten, for less fortunate neighbors, the sick, the little maid and her playmates, and indeed, for all who want them,—and they are many; still there are no signs of the supply diminishing.

"How far that little candle sheds its beams!"

When I look at the great bunches of flowers and think of the pleasure that one-third of a pound of sweet peas has given, the number of people who have enjoyed their beauty and fragrance, I wish that I might know how many lives have been brightened by that "good deed"—"A pound of sweet peas for forty cents."

Mrs. I. McRoss.

INSECTS WHICH ARE MAN'S FRIENDS.

The lady bird, so quaintly marked that it is hard to find two of them just alike, is one of the gardener's best friends, yet hundreds of them are killed because people in their ignorance don't know what a helper they have in this pretty, buxom little insect. A few days ago a writer in the New York Tribune visited a friend who has a garden full of all sorts of flowers, and back of these is the kitchen garden, with rows of currants and raspberry bushes. The leaves of both these shrubs were covered with blight or lice that were as green as the leaves on which they lived and thrived. Hunting about the bushes were a number of lady birds. The woman in her ignorance was killing these right and left, thinking they were doing all the damage, and when told they were her best friends was incredulous. A few minutes' careful watching, however, showed the small bug busy eating the smaller green pest. Small yellow pyramids showed where she had laid her eggs, which in a day or two would hatch. The woman saw and believed, and in the future the lady bird has a sure refuge and a welcome in her patch of flowers and fruit.

Another insect that is forever being killed owing to the ignorance of the general public is the dragon fly, also known as the needlecase. He is one of the most useful insects of this climate. In his larval state he subsists almost entirely on those small squirming threads which can be seen darting about in any still water, and which hatch out into the sweet singing mosquito. As soon as the dragon fly leaves his watery nursing ground, and, climbing some friendly reed, throws away the old shell and flies away, he is helping man again. His quarry now is the house fly. Not long ago the writer saw one of these insects knocked down in a veranda, where he had been doing yeoman's service, and the children and women seemed delighted, although they shrank back from the poor wounded dragon fly. They all thought he had an awful sting at the end of his long body -a cruel injustice. When the writer took the insect up there was general wonderment, which was increased when a captured fly was offered him and he ate it greedily, The boys of that household will never harm a dragon fly again. -Scientific American.

For Old or Young

"I am never without Ayer's Pills in the house, as I have found nothing so good for a disordered liver. I give them to my children for worms and tell all my friends that, as a medicine, Ayer's Pills have no equal for either old or young."—Mrs. H. P. STANCH-FIELD, Foreston, Minn.

AYER'S PILLS.

HIGHEST AWARDS AT WORLD'S FAIR.

Ayer's The Sarsaparilla THE WORLD'S FAIR.



ROCHESTER, N. Y., OCTOBER, 1895.

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200,000

Average Monthly Circulation.

Charles Valentine Riley.

Our readers will be pained to read of the unexpected death of Professor Riley, who for many years has been the leading entomologist of the country. His death occurred September 14th at Washington, D. C., and was caused by a fall from his bicycle. His age was fifty-two years. Professor Riley was a man in whom especially every gardener, farmer and fruit grower has had for many years a peculiar interest. His writings on insects, and especially on the insects injurious to vegetation and the means of destroying them, have been exceedingly numerous, and for years they have enriched our agricultural and horticultural papers, and farmers and gardeners everywhere have sought his counsel and been guided by his ad-

Professor Riley has been publicly engaged in the prosecution of his entomological labors for the past twenty-seven years. In 1868 he was appointed State Entomologist of Missouri. In 1878 he was appointed Entomologist to the Department of Agriculture at Washington, but shortly resigned the position while still continuing his work in the service of the government as the head of the Entomological Commission. In 1881 he was appointed as the head of the Division of Entomology in the Department of Agriculture, a position which he occupied until last year, and then resigned on account of impaired health. Professor Riley enriched the National Museum at Washington with his large collection of insects, consisting of more than 20,000 species, and of 115,000 mounted specimens, together with much more material otherwise preserved. The valuable periodical, Insect Life, issued by the government has been under the direct charge of Professor Riley since its commencement. The agricultural and horticultural community, especially, of this country sustain an inestimable loss in the death of this talented and devoted scientist.

Horticultural Notes on Albany.

While on a visit at Albany we had the pleasure of being taken about by our friends and informed of the projected improvements to the public parks, and shown the new grounds and driving over some of the connecting boulevards. These new park grounds, although only yet in the first stages of progress, are already attracting residents, and it will not be long before there will be a large population living in the new parts of the city in handsome villas surrounded by neat and roomy grounds. This will be a graet change from the compact dwellings on solid blocks, which have heretofore formed a feature of Albany which seems to have been copied from New York. Perhaps one reason for this has been the hilly surface on which the place is built which has made pedestrian locomotion laborious. But with trolley cars now running in all directions one can easily reach almost any locality in the city's precincts. The trend of population at the present time is to the southern and southwestern portion of the place, and the exceeding picturesqueness of the capital's location is brought to view from these high grounds. The rapid descent of the land to the river, throwing the mass of the city's buildings below the direct line of vision, allows a full view of the eastern hills dotted over with buildings, while the distant summits are crowned with forest trees, and if we turn to the south there are the lofty masses of the Catskills dimly blue in the distance. Probably in all the country there is not a city more grandly and beautifully situated, and it is not strange that the citizens are sensible of the desirability of these new residence grounds which are being rapidly purchased. The parks of Albany and the connecting driveways will eventually make the place even more attractive for residence than it is at the present time, although to mention the many fine features of this city would be a task. Washington park is at this time the only completed part of the city's park system. Although this piece of land is not large, being only about fifty acres in extent, yet it is very handsomely planted, and the walks and driveways are well kept. The whole place exhibits taste and care. The superintendent, Mr. Wm. S. Egerton, who has also superintendence of all the park grounds, was not at home when we called at his residence on the grounds, where the greenhouses are located. Very fortunately, however, we found Mr. Charles Sanders, the genial gardener, who very kindly showed us about and gave desirable information. The artifical lake in Washington park, with its drive all around it, is an admirable feature. At various points on the margin of the lake water plants were growing in great luxuriance. It was a revelation to see the water hyacinth growing there in large patches and blooming freely. This plant, which has been introduced to northern cultivators within the last three years, can evidently be raised with very little care. All it wants is a muddy pond margin, the shallow water of which is kept constantly warm by the sun, and there it will grow and bloom with the greatest freedom.

A very interesting border water plant was, also, a double sagittaria, which was hardy.

Our native Pontederia, P. cordata, was another constant, hardy resident of the water margin, as also the native pond lilies, Nymphæa odorata and N. tuberosa.

Limnocharis Humboldtii, or water poppy was growing and blooming freely.

Nymphæa Marliacea chromatella and N. M. alba were fine looking flowers, and the plants are hardy. Of tender species there were N. Devoniensis, a night bloomer, a large flower of a deep rose color, very beautiful; N. Zanzibariensis, a beautiful blue, and N. Dentata, white.

Our hardy Nelumbium luteum was there, and

Our hardy Nelumbium luteum was there, and as the crowning glory of all, the beautiful Lotus plant, Nelumbium Speciosum. This is a magnificent flower, which when open is six inches across, the petals being white at the base and shaded with a clear rose at the tips.

There are many trees in the streets of Albany, even in those which are completely built up, and this feature is being developed in all the newer portions. We had the privilege of looking into the "gardens" of a few citizens, and the great diversity of plants that may be raised in a little back yard, eighteen by twenty feet, and surrounded with high fences and brick walls must be seen to comprehend how it can be done. Only devotees of Flora could worship so devoutly at her shrine.

The Soll.

Under this title a small volume prepared by F. H. King, Professor of Agriculture in the University of Wisconsin, has been issued by MacMillan & Co., 66 Fifth avenue, New York. It treats on the nature of the soil, its relations, and the fundamental principles of its management. Some of the subjects treated are the nature, functions and origin of soils, their texture and composition, nitrogen in the soil, solution and diffusion of plant tood, the amount of water needed for largest yields of crops, how to save water, distribution of roots in the soil, soil temperature and how modified artistically, the relation of the air to the soil, drainage, irrigation, tillage and fertilizers.

It will be seen that here is a wide range of subjects upon which every soil cultivator should have some knowledge, and yet they are subjects upon which but little is known by most farmers, gardeners and fruit growers. We have not yet had time to read this book with care, but an examination of a few pages on different subjects have been sufficient to show that it has been prepared with care by a competent authority with a critical knowledge of his subjects. It is a book which should find a place in every farm library, and it is published at a price, 75 cents, which places it within reach of all who should have the information which it conveys. It is the first volume of the Rural Science Series, edited by L. H. Bailey, and which it is intended "shall treat every rural problem in the light of the underlying principles and concepts upon which it rests."

I Gave Up

Hoping I would ever be better, I had suffered so much and so long from sour stomach and kidney troubles, and other ailments. I happened to read about Hood's Sarsaparilla and thought I would try it. It proved a good trial. It was the means of saving my life. After taking two bottles I was a cured man, and after taking four bottles I was strong and muscular again. I gained 14 pounds. I shall gladly recommend

Hood's Sarsaparilla to all who long for health and strength."

to all who long for health and strength."-NICHOLAS SCHIEHSER, Summerdale, Ill.

Hood's Pills are tasteless, mild, effective.

BULBS FOR WINTER BLOOMING.

When I first began to plant bulbs for winter blooming several years ago, it was only as an experiment and I had little real help from the experience of others. So far as I could find out, no one, except two or three florists in our city, had ever attempted it, and consequently it was with fear and trembling that I begun the work. I commenced in a small way having four hyacinths, one narcissus and a handful of crocus bulbs. These, without a single exception, bloomed beautifully, and I can do no better with them now, after years of experience.

I well remember the hyacinth bulb that I planted in a glass in water that fall; it was a very dark purple variety called "Uncle Tom."

It was my especial pride, though its roots were very slow in forming and those in pots were well rooted and brought out into the bay window long before that one was ready. One day in February I went down cellar to look at it, and to my consternation I found the water in the glass frozen solid. I felt sure that the roots were ruined anyway, as they had then reached the bottom of the glass, so I pulled the bulb out, leaving the roots fast in the ice. Of course I then gave up all hope of blossoms from that bulb, but I determined to save it for future use, so I planted it in earth and in a few days the buds appeared, and when it blossomed it was the finest spike I had that year. The buds were probably just ready to push out from the bulb when the roots were frozen, and so when I parted the bulb and put it in a warm, sunny place it went right on without realizing the change. It would not do to recommend such treatment, but it simply shows how much neglect and abuse the bulbs will stand.

Though hyacinths are the best known and most satisfactory of our winter flowering balbs, there are many others which can be easily raised in an ordinary window: paper white narcissus, hoop petticoat narcissus, Chinese Sacred Lily, Van Sion single and double daffodils, Ornithogalum Arabicum or Arabian Star of Bethlehem, scilla, freesia, crocus, tulip, lily of the valley, ranunculus, anemone, besides several varieties of lilies.

Most of these bulbs require the same general treatment—the bulbs being planted in September, October or November, according to the time one wishes to have them blossom.

The largest and most perfect bulbs are usually kept for the last planting, as they can stand the waiting out of the soil better than the weaker ones. The soil should be mixed with sharp sand, and does not need to be very rich—a good mellow garden soil being all that is required for most of those named.

For hyacinths and other bulbs of the same size I use a 6-inch pot, placing the top of the bulb just even with the top of soil, pressing the dirt down well and after watering put the pots away in a cool, dark place for several weeks. During this time of rest the bulbs form plenty of roots to support themselves during their blooming season.

Usually at the end of five or six weeks the roots have reached the bottom of the pot, though all do not form roots in the same length of time, even when the other conditions are the same.

I have known some hyacinths to be eight or nine weeks in forming sufficient roots, and have had paper white narcissus fill the pot full of roots in two weeks.

Even if my bulbs should all be well rooted at the same time I should not bring them all into the window at once, as if they are kept perfectly dark it does them no harm to be left in their winter quarters a little longer.

When brought from the dark cellar they should be gradually brought to the light, not giving them a sudden change from darkness to sunlight, and soon the buds will appear, and before one can hardly realize it the bulbs have blossomed and faded and are ready to be removed to make room for another lot. Not that the flowers are of short duration—as when properly cared for they last a long time, but if left in the hot sun too long or are kept in a hot, dry room they fade quickly. When it is possible they should be removed to a cooler room when in blossom.

For the first few years I always procured named bulbs for winter blooming, thinking that no others could be a success for forcing, but since then I have found out that the mixed unnamed bulbs can be made to do as well, though we cannot be sure of the exact shade of the flowers; however, they can be obtained under the general colors as red, pink, yellow, blue, purple or white, and the double and single ones are kept separate.

The Roman Hyacinth will be found admirable for early flowers, as it can be forced to bloom earlier than the other sorts. The spikes of flowers are smaller and more loose, but there are several of them and as they can be flowered in time for the holidays they are great favorites.

Narcissus bulbs are general favorites, especially paper white, whose pure star-shaped flowers are so white that they almost shine. When the buds show themselves the soil in the pot must be kept wet all the time to keep them from drying up, which they are quite liable to do in the dry heat of the living room.

Hoop petticoat-narcissus is a sweet little flower, deep yellow and a full bloomer. It takes up so little room and blossoms so fully that all should have a pot of them. Golden Spur, one of the giant trumpet class, is a grand one for forcing, the blossoms being four or five inches across and of a beautiful golden yellow color. Trumpet major, yellow, and poeticus, white, are both fine for winter blooming. When carefully dried off after blooming most of these bulbs are in good shape for planting in the ground for permanent beds.

Ornithogalum Arabicum cannot be praised too highly. It needs the same care as a hyacinth, but does not bloom until late in the season. A friend of mine had one and she found that after all her other bulbs had blossomed, that showed no signs of buds, so it was banished to the cellar. Some weeks later she found it had one poor, weak blossom and many blighted buds on a weak stalk two feet long, all of which had grown in the dim light of the cellar. The flowers grew in very large clusters on a stalk eighteen or twenty inches high; each floret is about an inch in diameter, pure white with a shining black bead-like center. They remain in perfect condition some times as long as two weeks and their aromatic fragrance is very pleasing.

Those who have the ordinary Star of Bethlehem in their garden will do well to plant a few bulbs in a pot for winter; they are much handsomer when flowered in the house and cannot

fail to please everyone.

Freesias, too, take a long time to make up their minds to blossom, usually being nearly or quite six months from the time of planting till the blossoming season. If their sweet little flowers were better known, no window collection would be without them. Their fragrance is very delicate, yet it fills the room and can best be described as a combination of violet and jasmine. The bulbs can be used year after year and increase very rapidly.

The ordinary crocus seems to be something out of the ordinary when grown in the house, the blossoms grow so large and instead of only remaining open one day, often stay for four or five days, closing each evening and opening again in the morning. Ten cents worth of these ltttle bulbs planted in a pot will give more real pleasure when in bloom than a dollar's worth of some kinds of bulbs.

The Van Sion daffodils, both single and double, are a great acquisition to our collections, the color is so brilliant a yellow that the whole plant seems to shine, and as the flowers remain open a long time they pay for themselves many times over.

Lily of the Valley pips must be obtained late, after quite cold weather, indeed, freezing is a benefit to them. They are rather difficult to flower, though I always succeed in having some fine clusters every year. They must be kept damp and not too warm. I usually cover the top of the pot with sphagnum moss when the pipsbegin to grow and never allow the moss to become dry. This, I think, is the whole secret of success.

Tulips and lilies are somewhat difficult to raise in an ordinary window and I seldom try them. The tulips are never as handsome as when grown in the open ground, and the lilies take so long to come to maturity that I cannot wait for them. It is usually cheaper to buy a plant already budded from a florist and have the pleasure of the blossoms without the weary waiting.

Green lice trouble the lilies to such an extent that it is a continual warfare to keep them down.

Chinese Sacred Lily usually does finely forme, unless I get too careful of it and keep it in too warm a place. Usually they do best in earth, but the novelty of seeing them grow in water supported by pebbles induces people to plant them in that way. The double-flowered variety pleases most people best, though it has fewer blossoms than the single sort.

Scillas are not often seen in collections, but they are fine when well grown. S. Siberica is a lovely shade of blue seldom seen in our windows, and the flowers grow in long loose clusters. The plant is low growing and modest appearing as a violet. S. Clusii grows tall and the flowers are borne in a cluster on a long stiff stalk. It is a beautiful plant, but rather more shy of blooming than the former.

Ranunculus and anemone are two sorts not very common, but which when once planted will never again be omitted from the window collection. Treat the former exactly like hyacinths, though several can be planted in a 6-inch pot. The flowers are two inches in diameter, very double and of many colors—pink, white, red, yellow and varigated.

Anemone bulbs can be had in both single and

Anemone bulbs can be had in both single and double sorts and in several colors—red, blue, white, pink and varigated. The bulbs do best if left in the same pot for several years without being disturbed. New earth can be put on the top of the pot above the bulbs and that is all they need. They are sure to give satisfaction. When buying bulbs, buy them of your regular dealer, do not be beguiled into sending your order, be it large or small, to Holland.

A neighbor of mine, who is quite an authority on plants, sent to Holland one fall, fully expecting to get finer bulbs and more of them in that way.

Mine were purchased of my seedsmen, and when we compared notes later on, his flowers were no better than mine and had cost him some more. The extras in the line of boxes, packing, cartage, etc., made the cost on a small order higher than if bought in this country.

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FLORAL FESTIVAL AT SARATOGA.

The floral festival which was celebrated last year at Saratoga proved so successful that another was given this season on the 5th of September. The day proved to be a favorable one, although a slight shower - merely a little dripping from the clouds, prevailed for a short time in the afternoon before the parade started; it soon cleared away and thenceforth the skies were as kind as could be desired. A great number of people thronged the streets, having come in from the surrounding cities and villages, many from a considerable distance, and thus added to the numerous visitors which the place was already entertaining. All accessible windows, verandas, piazzas and other available places were occupied, while the greater masses were banked along the sidewalks. That there was a genuine interest and a keen anticipation of the show was very manifest. And, on the whole, it may be said that the expectations of the people were satisfied. All the carriages and the bicycles in the parade were ornamented with flowers, many of which were quite handsome. Large platforms on wagons, which were called floats, completely decorated with flowers, bore emblematic tableaux. A platoon of police headed the procession, followed by the grand marshal and his aids; next was the bicycle division, which was as very beautiful feature, the cyclists being both ladies and gentlemen. Governor Morton, occupying a carriage with some of the village officers, was preceded by a military band and the citizens' corps, and was followed by ladies and gentlemen and horseback

One of the floats was a representation of the First Settlers of the United States, being a pioneer backwoods scene; another was a floral chariot. The Methodist church sent Solomon and the Queen of Sheba; the United States Hotel, Flora and the Four Seasons, one was a Pompeian Scene; the Hathorn Lodge, I. O. O. F., The Three Links; one Sunday school was represented by the Chorus of America, and another by a Roman scene called The Return of the Conquerer. The Congress Spring Company reproduced a floral form of The Pagoda in the Park; another was The Geysers; one was an East Indian Coach; the G. A. R. Post showed a Camp Scene. Besides these there were Queen Flora, Wisdom and Folly, The Tally-Ho, and Arches in the Greenwood in Robin Hood's day. Congress Hall sent a float called Saratoga at Christmas Tide; one Sunday school had Roger Williams, the fugitive fleeing from persecution; the Daughters of the Revolution, The Surrender of Burgoyne. A number of others we do not now recall, excepting one which was a Negro cabin scene on a southern plantation. This was very interesting and amusing. The private carriages were numerous and all more or less decorated. Most of the hotels and some of the private houses were decorated. The flowers used were principally golden rod, sunflowers, Hydrangea paniculata grandiflora, white day lily, dahlias, zinnias, asters, gladiolus, marigolds and phlox, and the greens were from the native pines and firs, and the trailing lycopodium, and common asparagus.

Saratoga may well be congratulated on the good taste, the display generally, and the enthusiasm manifested by its citizens.

The battle of flowers was announced to commence at the upper end of the village on the countermarch, and we understood the programme was carried out. This was unfortunate, for the great body of visitors were in the centre of the place in the neighborhood of the large hotels, and there was considerable disappointment expressed by those who did not see it. There was a great lack of music, as there was only one band; there should have been at least four in a parade which extended nearly two miles. While the emblematic designs were well carried out and the decorations were in good taste, there was not that profusion of flowers which might have been desired. However, we have no disposition to find fault, but note the lacking points for future guidance. The affair was very creditable and no doubt if the festival is made a regular feature of the closing days of the season it will increase in attractions and command still greater patronage.

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A CALL AT DOSORIS.

This place at Glen Cove, Long Island, the summer home of Charles A. Dana, editor of the New York Sun, has become famous for its many fine specimens of rare and beautiful trees. This result has been produced by the good taste of Mr. Dana and the care and skill of Mr. William Falconer, who has charge of the place. We had the good fortune, early in September, to have the opportunity to look in on the grounds and to greet Mr. Falconer, who, for the short hour of our visit, directed our attention to some of the beautiful objects on the grounds. Any lover of fine trees could spend days examining this rare collection, but minutes instead of hours controlled our short stay. The grounds were bright along the drives and walks with flowering plants. A clump of Desmodium pendulifloram eight feet in diameter was a mass of bloom and had been so all summer. This plant is quite hardy and deserves more attention, as its great numbers of reddish pink, pea-shaped flowers make it very attractive. The Weeping Mulberry on these grounds is trained up by placing a tall pole by the side of the tree up by placing a tall pole by the side of the tree and training up a leader instead of allowing it to form a low head. This form makes a far more graceful object. Hale's Thin-shelled Hickory was in bearing on the grounds. The nut is very large and the shell very thin—two valuable qualities. Some hurried notes were made as we passed through the grounds and all too soon we were obliged to take leave of the attractive place and our interesting guide who attractive place and our interesting guide, who finds time with his other duties to edit the handsome publication Gardening, published at



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DOUBLE SWEET PEAS.



UR esteemed friend and occasional correspondent Mr. W. T. Hutchins, who is now widely known as the most zealous amateur cultivator of sweet peas in this country has

lately contributed an article to the American Florist, in which he shows that the great English grower of this flower, Mr. Eckford, has improved it by breeding. That its improvement is not-merely due to rich soil and high cultivation, but that by careful breeding and selection, varieties with larger flowers and more substance have been produced than the older varieties. He does not consider the attention that has lately been given to the sweet pea, a "fad," but that it is a popularity which will be lasting. He also thinks the popularity of the sweet pea has been jeopardized by "certain gaudy lithographs that were employed this year, doubtless with the kindest intention, to keep up the interest." The double flowers he considers "malformations," and adds that "those who bought seeds of so-called double sweet peas this year are not likely to challenge my statement."

Well, perhaps this is so; we have always mistrusted that the double sweet peas offered for sale last spring were anything but a strain which could be relied upon, and in fact many who purchased them have reported to us that from all the seeds they planted they never had one double flower. This was very disappointing, but the "malformations" were not in evidence.

Now it so happens that there is a double sweet pea of which our readers have already been informed, the Bride of Niagara, and it has been carefully bred for several years, and will be offered to the public next season with the assurance that it will be all that is claimed for it, and prove a most interesting and satisfactory variety.

Mr. H. says: "There is no such thing as a double sweet pea. No flower is doubled except by changing stamens into petals, and, as a rule, such flowers are regular in their form." It is remarkable that a man as careful as Mr. Hutchins usually shows himself to be, should make the statement that "no flower is doubled except by changing stamens into petals." Any well informed botanist or observant gardener knows that flowers become double otherwise than by the changing of stamens into petals; of course any change from the typical form of a species may be styled a "malformation," but it is by such changes that progress in horticulture has been made, and gardeners are no longer frightened by the use of the term. When we can have large, well formed flowers of sweet peas with two or three showy banners perfect in form, instead of one, there is no question that the public will be interested in them. Such flowers are produced by the Bride of Niagara, and there need be no hesitation in offering it for distribution. It has proved of great interest to all who have seen it growing the present season.

The statement, also, regarding double flowers that "as a rule, such flowers are regular in their form," has been made without due consideration. "The sweet pea must remain a single flower like the pansy," says our frind. Well, then, there is a double pansy, and a very handsome flower too, though it has not yet been distributed. But why should this seem strange, when we all know of the double violet of the same family of plants!

Without naming all that we might, here is a list of genera which have varieties with double flowers, and all of which in their normal state are of irregular form. They are given with the name of the natural order to which they belong standing opposite:

Aquilegia Ranunculaceæ.

Violet Violacea.

Balsam

Pelargonium Geraniacea. Tropæolum

Clitoris

Lupinus . Leguminosæ Lathyrus

Lobelia Lobeliaceæ Salvia Labiatæ.

Digitalis Linaria Scrophulariacea. Mimulus

It may be that more varieties of double flowers are in cultivation derived from single regular flowers than from those which are irregular. One cause for this is that there is a greater number comparatively of regularly formed than irregularly formed flowers, besides a great number of so-called double flowers are not really so, but are heads of flowers like asters, dahlias, and similar ones.

There is evidently much more to this subject of double flowers than Mr. Hutchins has taken into account, and if we can have varieties of sweet peas which will present two or three showy banners instead of one they will be warmly welcomed as double flowers, and will be preferred as much as the double rose is to the single variety.

CHRYSANTHEMUM SALAD.

The Japanese discovered long ago that chrysanthemeums, boiled with a clove and mixed with truffles, make a palatable dish; now the enterprising Parisian serves the blossoms raw with mayonnaise. The most remarkable achievement in floral salads was seen at a dinner given by the Duchess de la Torre. It was arranged in layers of multi-colored chrysanthemums, intermingled with dark and light violets, forgetme-nots, and rose petals. It was sprinkled over with tiny orange blossoms, and the edge of the great crystal dish was lined with small white lettuce leaves and nasturtiums. It was a delight to the eye, but how it tasted is not on record.



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VANILLA AND ITS CULTIVATION.

We are so accustomed to speak of vanilla as the product of the "vanilla bean," that perhaps few persons are aware that it has no connection with either the bean or the bean-family, but is produced by a beautiful, sweet-scented, climbing orchid. This widespread error doubtless arose from the fact that the vanilla capsule or pod, which is slender, from six to ten inches long and only three-eighths of an inch in diameter, has a vague resemblance to certain beanpods. It is much more like the pod of the so-called catalpa bean, which also has nothing to do with the true bean-family, being a begonia or trumpet-flower. The name is, however, too firmly fixed in popular language to attempt to change it.

The orchid producing the vanilla bean is known by botanists as Vanilla planifolia, and is a native of Mexico and Tropical America. It has a thick, fleshy stem, oval alternate fleshy leaves, and a short spike of numerous white, or greenish white, sweet-smelling flowers that are curiously irregular in shape, like those in most of the orchids. The plant climbs over trees and shrubs by means of numerous slender rootlets sent out from each joint of the stem, which cling to the bark or other support. It was formerly supposed that this orchid, like so many of its relatives, was an epiphyte, that it grew upon other plants, but derived its nourishment wholly from the air, but it is now known that such is not the case. It maintains connection with the soil throughout its whole life, especially by means of the rootlets which in the lower portion of the stem reach the ground. In its wild state it climbs fifteen or twenty feet high, but in cultivation it is usually kept down within easy reach of the cultivator, for much care must be taken not to injure the unripe pods.

The vanilla plant is always propagated by means of cuttings. In Mexico where it has been cultivated for nearly or quite a century, it is customary to take portions of the stems two or three feet long. The leaves are removed from several of the lower joints and usually three joints are laid under the soil and covered to a depth of two or three inches, and the upper portions trained against the support prepared for it. The soil has to be especially prepared by trenching to a depth of eighteen inches and must have a perfect drainage. The best soil is said to consist of fine, rich loam mixed with equal parts of sand and leaf-mold.

Something must be provided for the vanilla plant to climb over, and rough-barked living trees are perhaps the best, but almost anything such as rough, branching trees, trellis work, stone pillars or stone walls, may be utilized. The plants are best grown in moderate shade, yet a certain amount of sunshine is required to ripen the pod.

In its native country the vanilla flowers are fertilized by insects. That is, the flowers are so constructed that it is absolutely impossible for the pollen to reach the stigma or immature pod without external aid, and this office, in Mexico and Central America, is performed by a peculiarly constructed moth that visits the flower for the nectar always present. The pollen mass consists of thousands of little grains tied loosely

together by delicate cobwebby hairs. This mass has a sticky disk that adheres to anything touching it and is torn bodily from its pocket.

When the vanilla plant was first introduced into the West and East Indies it proved for a time a great disappointment. The plants grew vigorously and produced an abundance of fine flowers but no pods. All sorts of expedients were tried in the way of cultivation, but to no avail, and the cultivation was about to be abandoned, when the fact was discovered that the particular moth that fertilized it in Mexico was absent from its new home and consequently the plants were not able to set pods. After this, artificial pollenization was resorted to, and the pods were produced in characteristic abundance. The instrument with which this is accomplished may be a long needle or splint of bamboo, four or five inches long. It requires only a moment to do this, and one person may properly fertilize as many as a thousand flowers in a single morn-

The plants usually begin to flower the second year after planting, but do not reach maturity until the third and fourth years. The pods require a month to reach full size and six months more in which to ripen. The proper time for gathering the pods is determined by the appearance of a slight yellow tinge at one end or when they crackle slightly when pinched between the fingers. The process of curing is a long and somewhat complicated one, requiring in some cases as long as three months. Curiously enough the aroma of vanilla is said not to pre-exist in the pods, but to be produced by a process of fermentation. In Reunion, where it is extensively cultivated, the pods are placed in a basket and plunged for half a minute into very hot, but not quite boiling water. They are then placed on mats to drain after which, for the next six or eight days, they are exposed, between woolen blankets, to the sun, but kept in closed tin boxes during the night to undergo a slight fermentation. When the pods have become brown and soft they are placed in the shade to dry, care being taken that they do not mold. Daily they are carefully pressed between the fingers, slightly annointed with oil, which renders them supple and lustrous. When the pods are perfectly cured they are of a rich, dark chocolate color, pliable in texture, and perfectly free from moisture.

In Mexico the curing is somewhat different. After gathering, the pods are placed under sheds in heaps until they begin to shrivel. Then they are allowed to ferment slightly, after which they are exposed to the sun in woolen blankets during the day and kept in air-tight tin boxes at night. At the end of a day or a day and a half they have assumed a rich, chocolate brown color. They are then placed in the sun for two months or more to dry, at the end of which time they are, like the others spoken of, pliable and free from moisture.

When finally prepared the pods are sorted according to lengths and tied up in bundles of fifty and the bundles are packed it air-tight tin boxes. When properly prepared and in what is called 'prime condition' the vanilla pods become covered with a frosting of little needle-like crystals of vanillic acid, are soft when pressed between the fingers and give off the characteristic balsamic odor.

The perfume or essence is extracted from the vanilla pod by prolonged soaking in alcohol. The proper proportion is about one-half pound of pods to each gallon of sixty per cent alcohol. The pods are cut up into small pieces and should stand for a month with an occasional shaking, when all worth extracting will be found in the alcohol.

A word as to the sources of supply and quantities used may be of interest. The cities of New York, London and Paris may be regarded as the vanilla markets of the world. The supply sent to New York is produced in Mexico, and is regarded as the finest quality grown. The amount imported in 1891 was 135,875 pounds. The Pacific coast and western portions of the United States obtain a part of their supply from the Island of Tahiti and the Sandwich Islands, but the quantity imported in 1891 was only about 5,000 pounds. The quality is much inferior to the Mexican.

The London supply is obtained largely from Mauritius and Seychelles, but the raising of vanilla has never assumed much importance in any of the English colonies.

The greater part of the vanilla imported into France comes from Reunion. In 1880 the amount was 164,289 pounds and in 1889 it had increased to 506,463 pounds, or more than twice the product of the rest of the world.—F. H. Knowlton, Ph. D. in Popular Science News.

THAT SILENCED HER.—He: I have heard of persons homely enough to stop a train of cars.

SHE—Yes; and I think you would stop anything by just looking at it.

HE—Let me look at your tongue, madam. | Yonkers Statesman.

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PLANT SALES IN LONDON STREETS.

In a recent number of the Journal of Horticulture, "Wanderer" gives a sketch of a street sale of plants in London at night.

"What! horticulture in the streets—absurd!" I fancy I hear some reader remark, as he peruses these lines. Yet such is really the case, and anyone with a true taste for plants and flowers may never be at a loss to find something to attract his attention, even in the crowded streets of London.

In no other city perhaps in the world have the masses such facilities for obtaining plants, flowers, fruits, and vegetables as the inhabitants of the metropolis; and not the smokebegrimed, travel-stained examples that one might almost expect to find, but sturdy wellgrown specimens, stamped with the brand of high culture, such as would be difficult to find in many private gentlemen's establishments. So well have nurserymen and market growers studied the wants of the people, that they have become fully alive to the fact that it is useless sending anything but first-class produce into the markets. Some people may still have the idea that anything will do for sale; if so, the sooner they get rid of the fallacy the better. * *

It is not surprising that dwellers in the great city love to have a few plants and flowers to adorn their rooms, and with the majority of people, no matter what their state or condition in life may be, there is a regard for nature that cannot fail to assert itself, and even amongst the poorest of London's vast population it is a common thing, when laying out the money for the week's food supply, for a few coppers to be put aside for the purchase of a plant. Perhaps endeavors are made to keep it growing, attended in some instances by a measure of success, but in most cases it succumbs to the adverse conditions of the surroundings. Disappointed, no doubt, but not discouraged, the owner feels there is something wanting without his plant, and brings home another to take its place. And in this way the London plant supply has opened out an industry which is annually increasing, and as in trade of all kinds open competition is responsible for the excellent quality of the produce, and the extreme low prices that bring the re-sults of the gardener's art within reach of the crowded masses of the metropolis. Extremely interesting, too, it is to watch a sale of plants in the streets. On a recent Saturday evening when passing through a populous thorough fare crowded with barrows and stalls filled with both ordinary and extraordinary articles of merchandise, the attention of the writer was attracted by a bright display of flowers, made more brilliant by the flare of several naphtha lamps. Turning aside in order to study the plants more closely, they were found to consist of excellent specimens of Ficus elastica in 6-inch pots, not weak dwind-ling looking objects but well-grown, sturdy examples, clothed from the summit to the base with bright green leaves; fancy, zonal, and ivyleaved pelargoniums crowned with fine trusses of flowers, and the plants strong and healthy, showing unmistakable signs of good culture; fuchsias, chiefly Lord Beaconsfield and Lucy Finnis in 5-inch pots, shapely and graceful in habit, and displaying the same mark of good treatment, as each plant was well furnished with numerous bell-shaped blooms, with the addition of a number of small musk plants turned out of their pots—these formed the main objects for sale. The whole was arranged on a stall composed of two costers' barrows placed closely together with a flat table laid on the top.

Presently not a very sprucely attired individual took his stand on the table among the plants, a crowd quickly gathered round, and the sale begun. The auctioneer commenced by issuing several witty remarks, evidently with the intention of putting his audience in good humor. This apparently effected to his satisfaction, he

continued:—"Now, gentlemen, I've got a grand lot for yer to-night, and intends to sell 'em cheap; so bid up quickly and get your money ready. First of all, 'ere's a pelegonium; my word, ain't it a beauty? (and it certainly was.) Now, what shall I be allowed to say for it? What, no offer? Well, suppose I give yer a start. One shilling. Now then, who'll have

The crowd had evidently an idea that the price would stand some reduction, so kept silent. "Now, gentlemen," went on the salesman, "the quicker you buy the better we shall get on. Ninepence? who'll have it? Fancy, only ninepence for a plant like that; it's nothing else but giving it away. But, here you are, I'll take a sixpence for it, and if you can buy a plant like that in Convent Garden Market for sixpence I'll give you the lot." "Wot, ain't got no roots!" exclaimed the auctioneer, in response to some remark on the subject, as he turned the specimen out of the pot, "Ain't it, it though? What do you call them? 'Ere's a fine pelegonium smothered with flowers and as many more buds to come out, and I only want sixpence for it. Now, gentlemen, that's the lowest price I shall take, so seize your oppor-

Presently a purchaser stepped forward and the plant was duly handed over. The chief difficulty seemed to be now surmounted, and the sale proceeded briskly, until in a comparathe safe proceeded priskly, that in a comparatively short space of time several dozen plants were disposed of. As trade showed signs of slackening a little his attention was turned to the fuchsias, with the following remarks:—
"Now, look 'ere, gentlemen, it ain't often yer gets a chance of buying such plants as these, so if yer wants yer money's worth in the fuchsia line paye's yes time. The gets a splendid Lucy. line now's yer time. I've got a splendid Lucy Finnis here, and if you can go and buy another like it for the same price, well, I'll give it yer. Now, then, one shilling, ninepence, sixpence! What! not give sixpence for a plant like that? Well, you'd better take this chanee, 'cos you'll never get another. These 'ere flowers ain't stuck on, mind yer,' and the plant was given "Now, look here, gentlemen, I means to sell; fourpence! who'll have it?" and the plant was held up with an air closely approaching dis-

This seemed, however, to produce the desired effect. First one plant went, then another, and another, until in a short time the large stock was reduced to a few dozens. Anyone who knows anything at all about plants might well wonder how it were possible to raise and grow fuchsias which would be a credit to any gardener and fit for the adornment of any conservatory or drawing-room, and sell them in the streets for 4d. each; but still such is the case, and gives us a striking instance of how the public reaps the benefit of competition.

Thinking, perhaps, that a change might be advisable, a ficus was tried next, and half a crown suggested as a fair price, but at a street sale on Saturday night such a figure seems out of the question, and after much talking and bantering it fell to a shilling, and several were disposed of. Musks came next, preceded by a short preliminary oration by way of introduction from the auctioneer, as follows—"Now, gentlemen, I've got a few large flowered musks 'ere, and if yer wants yer houses scented from top to bottom, these are the things to buy. I've only got a few, so now's yer chance. 'Ere's a beauty. 'Ere, I'll take fourpence for it. What! is that too much? threepence, then; go on, tup-pence; who wants it?" Several seemed anxious to obtain it at the last mentioned price, and soon the whole was sold.

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INSECTS AND FLOWERS.

No side of natural history is more curious than the relation between insects and the flowering plants. In the primitive and simpler plants that live in the sea the male cells are displants that live in the sea the male cells are discharged into the water and row themselves along by the screwing motion of minute bristles until they reach and fertilize the egg cells of the female. In many land plants the male cells, discharged as clouds of golden pollen, are blown about by the wind; myriads perish, but a few reach their goal, and, fertilizing the young egg cells cause them to ripen into seeds. In many cells, cause them to ripen into seeds. In many cases, however, nature has curbed so reckless a prodigality, and the colors and scents of flowers are fruits of her parsimony. It may be laid down as a universal truth, to which the exceptions are only apparent, that plants bearing brightly colored or perfumed flowers require the aid of insects to fertilize them. The colors serve to attract the attention of the insects; the scents, especially in flowers that blossom by night, serve the same purpose. The insects come for the store of honey, or for the pollen of the plants, and their return gift to the plants is that flitting from blossom to blossom, they unconsciously carry the golden fertilizing grains from

For most flowering plants the visits of insects are a necessity. Let one but grow some common plants, like geranium or mignonette, under glass and muslin, so that no stray insect may reach them; the flowers will be formed, the perfume will be as sweet as usual, but the blossoms will fade without forming seeds. Many of our English flowers are capable of being fertilized only by one kind of insect. Thus, to choose a familiar instance, the common red clover is visited by the bumble bee; the petals are fused together, forming a narrow tube surrounding the honey glands and the organs that form the pollen. The long proboscis of the bumble bee is able to reach the deeply hidden stores; but the hive bee, whose tongue is shorter, though bidden to the feast by attractive color and smell, is perforce an inactive spectator. When clover was first grown in Australia it never seeded, and it was found that the tongues of the native bees were too short to reach the pollen. Still more often the gorgeous blossoms of the tropics remain sterile in England in the absence of the

particular moth or fly to which they are adapted.
Sometimes, as Darwin showed in his fascinating volume on "The Fertilization of the Orchids," the devices to secure that an insect shall not visit a flower without coming in contact with the pollen are extraordinarily complicated. An insect alights on a gaudy and sweet smelling blossom. An inviting landing place is ready in the form of a conveniently placed floral leaf; but the thing is a trick. No sooner is the platform touched than it gives way with a jerk, precipitating the helpless insect into the well of fluid. His wings are wetted, and he has to crawl out slowly. But pointed bristles prevent exit except by a narrow funnel, and, as he squeezes through that, his back becomes dusted with the sticky pollen. In most plants, however, the lures are simpler, and are adapted to many different kinds of insects. In spring, when the fields are bare, the blues and whites of the early flowers are sufficient to attract the notice of the few insects on the wing. During summer, when the world is covered with green, more glaring contrasts come into play, and the bold masses of orange and gold, of crimson and pink, appear. It is curious, however, that scarlet, the most clamant of colors, is the rarest in Europe. In the tropics and in South America it is one of the most common, and it were worth inquiring if European insects be color blind to scarlet. At night, when crimson and blue, pink and orange, become invisible, pale yellow and luminous white attract the night-flying insect by their phosphorescent radiance.

The scents of plants are almost more potent lures than their colors. At night they are naturally more varied and more potent. To drift in a backwater in a summer night, or to loiter titles till titles till "The properties of the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent in the scents of plants are almost more potent.

in a wood, is to set one dreaming of the spices of the tropic isles. The scents of the day are shy and indistinct; only in the mass one notices them, as in passing through a barren field, or by a thicket of gorse. But at night each blossom that is not asleep sends out a clamorous and insistant odor, and at the same moment one notices a dozen distinct and striking perfumes. But, by day or by night, the scents are not all such as are pleasant to us. Some indeed are not even within our consciousness. Thus the flowers of the Virginian creeper are almost invisible; they have green corollas and are hidden under the foliage. To us they have the scent that foliage. To us they have no scent, yet bees come to them from great distances, and during their season they are always crowded with visitors. Some of the scents most dear to us are despised by many insects. Butterflies will pass honeysuckle itself, or, indeed, any flower with a honeysuckle itself, or, indeed, any hower with a honeysuckle scent, unnoticed. At night, however, large hawk moths, by their attention to heneysuckle, show that they share our ideas of what is pleasant. Butterflies and bees, like ourselves, are unattracted by the carron-like smell of many plants, but these latter are visited by many beetles and flies, to which the per-fumes of the rose and the violet are unattractive.-London Saturday Review.

EELWORM, MITES AT THE ROOT AND WIREWORM.

In an article in the Journal of Horticulture a paper by G. Abbey is published on Eelworms and their eradication. Different kinds of plants infested with these pests are considered, and the use of various substances is described under different circumstances. The following statements in regard to the use of nitrate of soda and kainit are specially worthy of attention by our cultivators:

Dress the land in the spring, just before sowing seeds or setting plants, with nitrate of soda, one and three-fourths pound per rod, two and one half cwt. per acre, having it crushed fine, and evenly distributed when the ground is moist, but with a prospect of fine weather or only slight showers for a few days. This will kill slugs and leather-jackets, as well as eelworm, root mites, and wireworms.

Kainit, also crushed fine, may be used similarly to the nitrate of soda at the rate of two one-fourth pounds per rod, three and oneand one-fourth points per rod, three and one-fourth cwt. per acre. In using these substances separately there is danger of getting too much growth in the plant from the nitrate of soda, and too little, if not some retardation, by the use of the kainit, and in case of land broken up from old pasture, or badly infested with grubs or wire worm, the quantities separately are not only insufficient, but not the correct thing for the crop, say potatoes. In that case, one and three-fourths cwt. of nitrate of soda and three and one-fourth cwt, of kainit, mixed, per acre, or three and one-half pounds per rod will give a good account of the parasites the land contains and produce excellent results in the crop. Half the amount of this mixture is sufficient on ordinary land, and it is just as good for tomatoes as for potatoes. As most people like things worked out for them, especially those having most time for making calculations and only requiring small quantities, it may be stated that the proportions are in pounds, one and three-fourths pitrate of soda, two and three-fourths fourths nitrate of soda, two and three-fourths kainit, both crushed fine, thoroughly mixed; rate three and one-half pounds per rod, two ounces per square yard.

Soon after Lord Sydney's elevation to the peerage he happened to observe in company that authors were often very ridiculous in the titles they gave.

"That," said a gentleman present, "is an error from which even kings appear not to be ex-

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THE LILAC BORER.

An inquiry is sent to the Scientific American from Buffalo, N. Y., in regard to a borer that infects lilac bushes. The enquirer thinks also that it infests other trees and bushes, doing great damage. An answer to this inquiry is given by Professor C. V. Riley, and as it appears that the insect in question is increasing in numbers and liable to do considerable injury, the answer is here reproduced in full for the benefit of our readers:

ANSWER BY PROFESSOR C. V. RILEY.

Tho whitish worm, with light brown head, three pairs of short horny legs on the thoracic segments bepairs of short horry legs of the thoractic segments be-neath and five pairs of membranous prolegs, one pair each on the sixth, seventh, eighth, ninth, and last segments of the body, sent by Mr. H. D. Doll, of Buf-falo, N. Y., is the lilac borer, larva of Podosesia syringæ (Harr.) This is one of the Ægerian moths, which in general appearance and flight recalls one of the paper wasps belonging to the genus Polistes. The wings are narrow, the front pair smoky brown, the hind pair transparent between the veins, and the legs long and banded with yellow and black. The female lays her egs in patches on rough or knotty places on the bark of lilac or ash, and on branches generally from one to three inches in diameter. Sometimes, however, the larva is found in the main trunk or in branches of seven inches and upward. The egg hatches in about six days and the larva at once eats through the bark into the solid wood. The larva pupates in May in a light cocoon, after cutting a passageway to the bark, leaving only the thin outer covering thereof, and the moth issues some three weeks later, the chrysalis having pushed its way par-tially out of the bark to facilitate the emergence of the moth, as is the habit of other members of the

The work of this particular insect is confined to the lilac and ash, and my own experience in Washington and elsewhere would indicate that it is even more troublesome to the ash than to the lilac. also in this latitude two generations annually, so that I have known young ash trees that were growing vigorously in spring to be entirely riddled and killed during a single year.

Your correspondent is mistaken in attributing the your correspondent is mistaken in attributing the injury to other kinds of shrubs to the work of this particular species, and the probabilities are that the trunks and branches of other trees which have been sawn through as he describes are affected by some other insect, of which almost every tree and shrub has its own particular species. There are, in fact, so many that it would be useless to offer suggestions without more definite and specific information, though the probabilities are that he is troubled by the larva of the leopard moth (*Zeuzera pyri*), a comparatively recent introduction from Europe, but a species which has multiplied exceedingly and has proved very destructive, especially in New York State.

The lilac borer is not easy to deal with, and the best preventive that I can suggest is to prune the best preventive that I can singgest is to plane the bushes down well and theu paint the branches with a mixture of air-slacked lime and Paris green, in the proportion of one part of the green to fifteen or twenty of the lime. This should be done early in May and repeated later if heavy ralns wash off the mixture. The parent moth will probably avoid such mixture. The parent moth will probably avoid such trees or shrubs, but if she should oviposit on the limbs thus treated, the newly hatched larva will perish in endeavoring to eat into the wood.

BETSEY, an old colored cook, was moaning around the kitchen one day, when her mistress asked her if she was ill. "No ma'am, not 'zactly," said Betsey. "But the fac' is, I don't feel ambition 'nough to get outer my own way."

A YOUNG MONEY MAKER.

In these hard times your readers of failures and misfortunes may like a change, and be pleased to learn of a way that any industrious person can make learn of a way that any industrious person can make money. I am plating and re-plating jewelry, watches, knives, forks, spoons, etc. I made \$47 last week, and \$37.17 in \$4\forall days of this week. I think this good for a boy. I bought my machine from W. P. Harrison & Co., of Columbus, Ohio. Anyone can get circulars by writing to them. If this passes the waste basket I will write again. A BOY READER. I will write again.

SMALL CITY PARKS.

In many of the smaller cities and towns of the United States, and especially in the western states, are blocks of land surrounded by streets which are reserved for public squares or small parks. They are generally planted with soft maple and elm trees. There is a band stand in the center and walks run diagonally across the square from corner to corner and are used as thoroughfares. The rest is left to grass and weeds, and probably mown with a scythe once or twice a season, Also we find many signs "keep off the grass." Some of the squares or parks, owing to the paving and improvements of the surrounding streets, are generally low, muddy and uninviting places. In fact, this was a good description of Spencer Square at Rock Island, Ill., a few years ago, until the president of the Citizens' Improvement Association, a real philanthropist and friend of the poor, interested the city council to have the square filled and walks laid out, trees and shrubs planted and flower beds made and filled. Then various citizens contributed vases, a fountain, entrance arches, a statue of Black Hawk (the famous Indian chief who lived near here), and various other gifts, until now Spencer Square is known far and wide as one of the most beautiful spots in Western Illinois.

The lawns are well kept, the flowers and beds filled with free blooming plants, and the vases are a source of enjoyment to many. Seats are furnished along the path for those who care are furnished along the path for those who care to use them. The only objectionable feature I find in it are the signs, "please keep on the walks," which is a polite way of expressing the odious "keep off the grass." The intelligent American resents it. To walk upon the grass when it is dry won't hurt it, nobody wants to walk upon it when it is wet, especially where good walks are provided good walks are provided.

Parks are for the public use, made for and

paid for by the people, and there are comparatively few who would knowingly destroy what they have an interest in. Public parks are grand accompaniments to the public schools in our education and elevation, and we should have all the enjoyment to be derived from the use of them. If the people persist in walking on the grass, along side of a walk, place some wires the grass, along side of a walk, place some wires or other obstructions to prevent them walking there, but let them walk and sit on the balance of the grass all they please. If bare spots appear in the grass sod them over again; the people will pay for it cheerfully. If "keep off the grass" signs must be used, please take them away every holiday and Sundays, and let the people enjoy what they pay for. During the Columbian Exposition at Chicago every Sunday hetween thirty and fifty thousand or more day between thirty and fifty thousand or more people visited Washington Park to see the flower beds there, and as they were in such numbers that they could not be kept on the walks they used the grass, and they have used it ever since, and Mr. Kanst, the gardener at Washington Park, says the people do not hurt the grass by walking upon it in such numbers, and they enjoy it .- John T. Temple in Gardening.



Hev! Stop that Cow!

The voice came tearing down the road close-ly followed by the animal itself. The wheelman addressed was an expert base ball player, but hardly knew how to tackle that kind of a "flyer." She was the "coming cow" that had "thrown off the yoke" so to speak. By waving his coat he turned her into a string of Page fence. With a beautiful "curve" she landed in the ditch and was led off completely subdued. The wheelman exclaimed, as a "catcher," a "pitcher," a "short-stop" and a "fielder," the Page fence is in it.

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(From U. S. Journal of Medicine.) Prof. W. H. Peeke, who makes a specialty of Epilepsy, has without doubt treated and cured more cases th any living Physician; his success is astonishing. We have heard of cases of 20 years' standing cured by him. He publishes a valuable work on this disease which he sends with a large bottle of his absolute cure, free to any sufferer who may send their P.O. and Express ad-dress. We advise anyone wishing a cure to address. Prof. W. H. PEEKE, F. D., 4 Cedar St., New York



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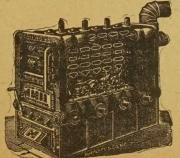
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to seven feet in height, the branches falling to the ground and trailing on the surface of the lawn. Mr. Wm. Falconer has shown that the head can be carried up for a considerable height by setting a tall pole in the ground by the side of the stem, and each year tying to it the main shoot

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To New York Ledger Readers.

In No. 36 of the New York *Ledger*, dated Sept. 14, we begin a wonderfully interesting story, entitled

The Mystery of the Inn by the Shore. By Miss Florence Warden, Author of "The House on the Marsh,"

The interest is centered on a deep and puzzling mystery. The absorbing fascination which is given to this story on account of the mystery has led the editors of the Ledger to make the offer of \$1,000 in Cash Prizes, to be awarded to the parties first sending us either the true explanation of the mystery or the explanations that are nearest to the true solution.

The money will be divided into 36 prizes as follows:

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Please remember that this \$1,000 in Cash rizes will be awarded, divided as above, even we do not receive one true solution. Just as

sure as we receive 36 answers, the 36 Cash Prizes will be given to the best 36 answers—not necessarily correct answers.

The readers of the Ledger competing for these Cash Prizes can send in as many explanations of the mystery as they wish, but each explanation must be on a coupon taken from a copy of the New York Ledger.

The New York Ledger is issued simultaneously all over the country. Hence, in order to be fair to all competitors, the time of each explanation will be recorded according to the post-office stamp indicating the date on which the letter containing it was mailed.

The complete explanation of the distribution of these Cash Prizes will be found in No. 36 of the New York Ledger, dated Sept. 14th, which contains the opening chapters of "The Mystery of the Inn by the Shore," and the Coupon.

The Ledger is for sale by all newsdealers, price five cents per copy. Your newsdealer will order it for you if he has not got it.

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Address all inquiries for further information in regard to the \$1,000 in Cash Prizes to

Prize Story Editor, NEW YORK LEDGER, ROBERT BONNER'S SONS, Publishers, Ledger Building, New York.

of the season's growth. In this way the stem continues to lengthen, while it is sending off new shoots which droop down around it. It is much more graceful in this form than when allowed to make its head low down, in the ordinary way as shown in the illustration herewith. One can change one of these low headed trees to a tall one by taking the course described. In a few years the specimen will appear quite

QUICK-WITTED.

A comedian in a French theatre once made a great hit out of a painful accident. One day, while indulging in a bit of horse-play on the stage, he hit his head violently, entirely an accident, against one of the pillars of the scene on the stage. On hearing the thud everybody uttered a cry. "No great harm done," said the comedian. "Just hand me a napkin, a glass of water and a salt cellar."

These were brought and he sat down, folded

the napkin in the form of a bandage, dipped it in the glass, and emptied the salt cellar on the wet spot. Having thus prepared a compress according to prescription, and when everyone expected he would apply it to his forehead, he gravely rose and tied it round the pillar.

The effect of his action was such that ever one set him down as the readiest and wittiest man in his profession.

NEW WAY TO CURL THE HAIR.

To the Editor:
When I was at the seashore this summer I found something that made me perfectly happy
—a way to fix my hair so that it stayed in curl —a way to fix my hair so that it stayed in curi for a week, even when the air was so damp it took out the other girls' crimps. This "Crimpo-line," as it is called, costs only 50 cents a pack-age, and is mailed by the Crimpoline Co., whose offices are in the Y. M. C. A. building, Vt. I have just sent them a dollar for three packages, so that I shall have enough for all winter. I know so that I shall have enough for all winter. I know my hair will be the admiration of everybody.

Earnestly yours,
FLORENCE WHITE.

JAMES VICK'S SONS, Rochester, N. Y.

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for
Winter
Blooming
in the
House
and
Outdoor
Planting.



Lilium Harrisii. Easter Lily.

The flowers are large, pure white and trumpet-shaped, unexcelled in its beauty by any other plant, while its fragrance is simply exquisite. This is the most valuable and popular variety in cultivation for winter blooming, many thousands being grown each season for church decoration at Easter. Plant the bulb in a six-inch pot and by starting a few at intervals of a few weeks, a succession of bloom may be had for a long time.

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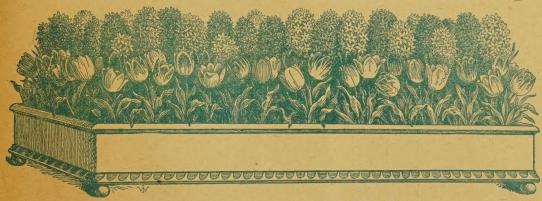
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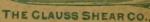




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